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ABSTRACT

This report describes participation, student characteristics, and achievement for 10 high school courses assessed by the North Carolina End-of-Course Testing Program in 1990-91. Subject areas are: (1) Algebra I; (2) Geometry; (3) Algebra II; (4) Economic, Legal, and Political Systems in Action (ELP); (5) U.S. History; (6) English I; (7) Physical Science; (8) Biology; (9) Chemistry; and (10) Physics. In 1990-91, 534,223 students took End-of-Course tests. Participation in advanced mathematics and science courses varies by sex, parental education, ethnic group, and post-high school plans. Overall achievement appears to be increasing slowly in Algebra I, Biology, and Chemistry. Average performance also differs by sex, ethnic group, parental education, post-high school plans, anticipated final grades, and school system. Results support the validity of the End-of-Course tests. Schools and school systems can identify strengths and weaknesses in instructional programs by examining relative performance on the items that these tests assess. In addition, the End-of-Course tests are part of three state accountability systems. Ten tables present information about student participation and achievement. Twenty-three figures present testing results in graph form. In addition, 32 pages of tables identify outstanding school systems and give results for 133 school systems. An appendix (10 pages of tables) lists core score distributions. (SLD)

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End
of
Course
Testing

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Secondary Education in North Carolina:

A Report of Student Participation and Performance in

Algebra I
Geometry
Algebra II
ELP
U.S. History

English I
Physical Science
Biology
Chemistry
Physics

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North Carolina Department of Public Instruction

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Foreword

While there are notable exceptions, our high schools presently are not providing the high quality of education needed for students to achieve their personal best and to be prepared for an increasingly complex future.

In 1989 North Carolina dropped to the very bottom among all states and the District of Columbia on the Scholastic Aptitude Test (SAT), providing an indication that secondary education in North Carolina needs attention. Our SAT scores improved in 1990 and 1991, indicating that improvements do happen when our teachers and principals target their efforts toward achieving a goal. But improvements related to SAT scores are only a small part of the complex enterprise making up secondary education today. We must broaden our focus to include the entire range of academic instruction and strengthen our requirements for graduation. All students will need preparation in basic subjects like algebra and biology, and our brightest students need to be challenged with more rigorous preparation like that found in Advanced Placement courses.

This report, *Secondary Education in North Carolina: A Report of Student Participation and Performance in Algebra I; Geometry; Algebra II; Economic, Legal, and Political Systems in Action; U.S. History; English I; Physical Science; Biology; Chemistry; and Physics*, is based on results from the state's End-of-Course Testing Program. It provides important baseline information on where we are as school systems begin implementing local Senate Bill 2 plans to improve student performance. There are examples of excellence. Several school systems provide Algebra I instruction to all or most students, and we need to learn from them. Over the last five years, there have been modest gains statewide in the proportion of students taking advanced mathematics and science courses, and in the percentage of students beginning an accelerated mathematics sequence with Algebra I in the eighth grade. While I am pleased with these results, they are not enough. It is clear from the results described in this report that more students are capable of taking advanced courses than are currently enrolled in them.

This is an important report. It provides information that can be used in making policy and program decisions concerning our high schools. But, perhaps more importantly, it provides a baseline so that those decisions can be evaluated over time and we can adjust our course as necessary. Ultimately, information such as that provided here will be used to judge the effectiveness of our decisions in achieving our goal of successful secondary education for all students.

This report is one of several that the Department of Public Instruction will release this year to help educators in the state evaluate secondary programs and chart progress toward their goals. *North Carolina Scholastic Aptitude Test Results*, for example, describes achievement in higher order thinking skills as measured by the SAT.

Bob Etheridge
State Superintendent of Public Instruction

Secondary Education in North Carolina:

A Report of Student Participation and Performance in

Algebra I
Geometry
Algebra II
Economic, Legal, and Political Systems in Action
U.S. History
English I
Physical Science
Biology
Chemistry
Physics

Testing Section/Division of Accountability Services
North Carolina Department of Public Instruction

Raleigh, North Carolina 27603-1712

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State Superintendent of Public Instruction

Published March 1992

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Development of a comprehensive report on student participation and performance in selected high school courses requires the effort of many individuals. Especially critical to the successful publication of this report were Kevin Kirby for report preparation; Chris Averett and Martha Ward for their careful reading of the report; Betty Marsh and Marilyn Zuckerman for thoughtful suggestions; George Stubblefield and Ken Barbour for computer programming; David Mintz for graph preparation; Caroline Barbour for proofreading; and Faye Atkinson for report production.

Executive Summary

This report describes participation, student characteristics, and achievement for ten high school courses assessed by the North Carolina End-of-Course Testing Program in 1990-91. The subject areas are Algebra I; Geometry; Algebra II; Economic, Legal, and Political Systems in Action (ELP); U.S. History; English I; Physical Science; Biology; Chemistry; and Physics. Background information on the history, purposes, and development of the End-of-Course Testing Program is also given. Highlights of this report are listed below.

- Participation of North Carolina students in Algebra II, Biology, and Chemistry appears to be typical of that in other states, but participation in Algebra I and Physics is somewhat lower than that in other states.

- Participation in advanced mathematics and science courses varies by sex, parental education, ethnic group, and post-high school plans, and is widely variable among school systems. The variability in school system participation cannot be totally accounted for by differences in ability levels of school system populations.

- The percentage of students taking the next course in the advanced mathematics sequence is somewhat lower than the percentage passing the previous course. The percentage taking the next course in the science sequence is dramatically lower than the percentage passing or achieving a grade of at least a *C* in the previous science course.

- The percentage of eighth-grade students in an accelerated mathematics sequence, allowing for four additional advanced mathematics courses, has grown since 1985-86 from 11.3 to 16.1 percent. However, it appears that only the brightest students have the opportunity to be in this track, and ten school systems do not offer Algebra I in the eighth grade.

- 1990-91 Algebra I, Biology, and Chemistry students on average are answering two to three more test items correctly than their counterparts at initial administrations several years ago. These improvements reflect about half a letter grade when placed on a grading scale. Thus, today's students are half a letter grade stronger in their content knowledge of these courses than students a few years ago. Furthermore, grading standards have become more stringent as overall achievement has increased.

- Average performance on all tests differs by sex, ethnic group, parental education, post-high school plans, anticipated final grades, and school system. The largest average differences by sex occur on the English I and Physics tests, with females averaging higher scores in English I and males averaging higher scores in Physics. Average scores for black students and American Indian students are lower than those for white students and "other" students. Students whose parents have some education beyond high school tend to score higher, on average, than students whose parents are less educated.

- Statewide performance on End-of-Course tests reflects the overall statewide grading patterns of teachers for student performance throughout the school year, which is an indication of the validity of the tests.

- Average scores for students planning to attend four-year colleges and taking the selective courses of Algebra I, Geometry, and Algebra II are between the average for *C* and *B* students in these courses. Average scores for students planning to attend four-year colleges and taking the general courses of Biology and English I, or the highly selective Physics course, score similarly to the average for *B* students in these courses.

- Two indices of program effectiveness that reflect not only "what students know" but also "how many know it" are reported for all ten courses. These indices, yield and effective yield, have generally increased since the beginning of End-of-Course assessment in each selective subject. Gains in effective yield in Algebra I parallel the gains in yield, indicating that the additional students taking Algebra I are performing at acceptable levels.

- Both yield statistics for school systems are significantly correlated with other measures of educational performance including average CAT scores and SAT yields. This result supports the validity of the End-of-Course tests as measures of school system performance.

- Outstanding programs are identified in terms of overall performance, participation, yield, effective yield, and change in these indices since the 1989-90 school year. The top ten school systems are listed for each area. It can be seen from the overall list that many school systems are making improvements in one or more areas in secondary education. Eighty-eight of the 133 school systems are in one or more categories of outstanding programs.

- Of the 534,223 End-of-Course tests taken in 1990-91, 661 were perfect scores. On 8,511 tests, students missed no more than three items.

Schools and school systems can identify strengths and weaknesses in their instructional programs by examining relative performance on the goals and objectives measured by over 2,000 test items assessed in 1990-91 across the ten subject areas. Comparative data on grading practices and participation rates give school systems additional information for planning and program evaluation. This detailed information is supplied directly to school systems in the form of comprehensive goals reports.

Beyond the use of test information for improved decision-making, evaluation, and planning, the End-of-Course tests are part of three accountability programs. North Carolina's Program for Accreditation, Senate Bill 2, and the State Board of Education's Report Card for School Systems use student outcomes, including scores on End-of-Course tests, in the accountability process. This detailed information is supplied directly to school systems in the form of comprehensive goals reports.

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Section I : Background

Introduction

In July of 1983 the North Carolina General Assembly directed the State Board of Education to define and to estimate the cost for a basic education program. The Basic Education Program which was adopted by the State Board of Education and funded by the General Assembly includes support services, such as counseling and psychological services; promotion standards and graduation requirements; drop-out prevention and remedial and compensatory education services; programs for exceptional students; material support; staffing ratios at the school and district level; staff development; facility standards; and a *Standard Course of Study* that describes a common core of knowledge and skills to be available to all North Carolina students. The Basic Education Program, of which the *Standard Course of Study* is a part, describes "what each child in the North Carolina public schools is guaranteed." The *Standard Course of Study* in high school includes courses in the arts, communication skills, healthful living, mathematics, science, social studies, second languages, and vocational education. In an attempt to ensure that the state curriculum reflects a consensus view of what is considered basic education, the development process for the *Standard Course of Study* involved teachers and curriculum specialists from local school districts as well as state level staff and university specialists in the various curricular areas.

To assess the implementation of the *Standard Course of Study*, the Basic Education Program also includes curriculum testing in basic skills in grades 3, 6, and 8; minimum competency testing in high school; and an end-of-course testing program for high school courses. The purposes of the End-of-Course tests are two-fold:

1. The tests provide information about each individual student's performance relative to that of other students in North Carolina;

2. The tests provide information about school and school system achievement on the subject area goals and objectives specified in the *Standard Course of Study*.

Based on statewide enrollment patterns and recommendations made by two commissions on education in North Carolina, the courses chosen for initial test development were Biology and Algebra I. In the spring of 1985, soon after the *Standard Course of Study* was written, item pools for these two courses were built. The results of the item development phase indicated that the Algebra I items were sufficient in quality and quantity to merit building End-of-Course tests. The first End-of-Course test of Algebra I was implemented in the 1985-86 school year. Since then, one or two courses have been added to the End-of-Course Testing Program each year. In 1990-91 ten courses were assessed: Algebra I; Geometry; Algebra II; Economic, Legal, and Political Systems in Action (ELP); U.S. History; English I; Physical Science; Biology; Chemistry; and Physics. Items for Healthful Living are being developed for field-testing in 1992-93 with statewide implementation scheduled for the 1993-94 school year. (The full implementation schedule can be seen in Table 3.) North Carolina is one of only a few states that have statewide assessments by subject area in high school, and is the only state with a comprehensive assessment program in high school mathematics, science, social studies and communication skills.

Using the summary information sent to school systems about performance on goals and objectives, schools and school systems are able to analyze strengths and weaknesses in their instructional programs and allocate resources based on this information. Comparative data on grading practices and participation rates give school systems additional information for planning and program evaluation. Beyond the use of test information for improved decision-making, evaluation, and planning, the End-of-Course tests are part of three recently-mandated accountability programs. North Carolina's Program for Accreditation, Senate Bill 2, and the State Board of Education's Report Card for School Systems include student outcomes, including scores on End-of-Course tests, in the accountability process. North Carolina's Basic Education Program promises students a similar basic education no matter where they live, and these tests were mandated to help fulfill this promise.

The purpose of this report is to describe achievement, participation, and student characteristics in ten high school courses. Indices of effectiveness that combine achievement and participation are described for selective courses. Outstanding programs are identified in terms of 1990-91 overall achievement, participation, effectiveness, and gain in all these indices. Finally, indices of achievement, participation, and effectiveness in all ten subjects are reported for the 133 North Carolina public school systems.

This report is divided into five sections. Background information on the End-of-Course Testing Program is provided in Section I. Section II contains performance information for the ten courses, followed by graphical representations of the data in Section III. Results are described in paragraph form in Section II and highlights accompany each graph in Section III. Outstanding programs are identified in Section IV and results for all school systems are provided in Section V.

Structure of End-of-Course Tests

To fulfill the dual purposes of student reporting and curriculum reporting, multiple test forms are administered in each classroom. Each test form consists of a core of items taken by all students, and one of three to five sets of variable items. For example, five forms of the Algebra I test are administered each year. The core contains 60 items and the variable sets contain 35 items, so that a total of 235 items (60 + (5 x 35)) are administered in each classroom. Individual student scores are based entirely on core items. The large number of test items provides broad curriculum coverage, and school and district summary reports include scores based on items matched to particular goals and objectives.

During the test development process a large pool of test items is written so that different forms of the tests can be administered each year. The core tests are statistically equivalent so that comparisons of performance on the core tests can be made across years. The use of different forms each year, the administration of over 145 test items in each classroom, and the match of test content to the *Standard Course of Study* virtually eliminate problems in assessing educational improvement associated with "teaching to the test."

Most North Carolina End-of-Course tests are composed of multiple-choice test items written to reflect the *Standard Course of Study* for each subject. However, the Geometry test requires students to write two proofs. The proofs portion of the Geometry test is administered in late March and scored by specially trained teachers at centralized scoring sites using a focused holistic scoring method. Each student writes two proofs, one common to all students and one of four variable proofs, so that five proofs are administered in each classroom.

The three English tests will differ from the other subject area tests. Each test will measure only a portion of the curriculum each year, but across the three courses (English I, II, and III), the major areas of the curriculum will be measured. Because English is a required four-year course sequence, the State Board of Education and the North Carolina Commission on Testing determined that the most efficient method for any in-depth assessment would be to concentrate on particular areas of the curriculum each year. This decision was made after consulting with writing specialists, an advisory group of high school English teachers, an advisory group of university professors of English, and the Communication Skills and Testing Areas of the North Carolina Department of Public Instruction. Therefore, on the ninth-grade English I Test, definition and application of literary terms, proofreading and editing skills, and reading comprehension are measured. For English II, the students will write two compositions, one common and one of four variable essays. Four types of writing will be assessed in each classroom each year: argumentative, expository, narrative, and descriptive. The essays, some of which will require literary analysis, will be scored for both content and conventions, including sentence formation, word usage, mechanics, and spelling. The eleventh-grade English III tests will assess reading comprehension and literary analysis.

Test Development Process

The *Standard Course of Study* and the accompanying *Teacher Handbook* specify curricular goals and objectives by grade and subject. To ensure the instructional validity of the tests, teachers throughout the state are surveyed to determine which objectives are basic and important to measure on End-of-Course tests. After the survey, some objectives may be designated as relevant only to accelerated courses, and therefore are not tested on the End-of-Course tests. Specially trained North Carolina teachers in each subject area write test items to match specific objectives in the *Teacher Handbook*. Approximately 1,200 items are written for each course so that multiple forms of each test can be developed. After editing, the items are evaluated by subject area specialists and teachers from all regions of the state for curriculum match, format and artwork, absence of bias, and technical quality. The items are placed into field test booklets and are administered in randomly selected North Carolina schools. After field testing, the items are subjected to statistical and psychometric analyses and further curricular review, which typically results in elimination of approximately 25 percent of the item pool, leaving about 900 items from which to build the core and variable portions of the End-of-Course tests. Several versions of the final tests are reviewed by North Carolina teachers and curriculum specialists before statewide administration. Alternate forms of the core tests are field tested during the first year of statewide administration. These forms are adjusted so that equivalent core tests are administered each year.

The development of the performance assessments in Geometry and English has involved advisory groups composed of state level curriculum experts, local curriculum specialists, teachers from the various regions of the state, and university professors. The advisory groups determine the scoring criteria and the score scale. Eighty English II prompts were administered during the 1988-89 school year in a statewide field test. A scoring guide illustrating the scoring criteria was distributed to English teachers in the fall of 1990. Revised prompts were field-tested in 1991 and the English II test will be administered for the first time in March of 1992.

Section II – Performance on the End-of-Course Tests

To meaningfully interpret End-of-Course test results, both participation and performance must be examined. This section discusses the different purposes of several measures, their definitions, and the implications for interpreting test results. The three measures are participation, performance, and yield.

Participation

That education should only *offer* excellent instruction is a common, yet narrow, view. Not only should excellent classes be available, students must also be encouraged and choose to take them. This concept is measurable by participation rates – what percentage of the student population takes each course. For both of the mandatory courses – English I and U.S. History, participation is not very useful since all students must take the course to graduate. Although Biology, ELP, and Physical Science are not specifically required, nearly all students use the courses to fulfill various requirements. Therefore, participation for this report shall focus on the remaining five selective subjects – Algebra I, Geometry, Algebra II, Chemistry, and Physics.

These five subjects are basic to the courses in the mathematics and science sequences, so critical given the pace of current technological advancement. Typically, students take courses in the order of Algebra I, Geometry, and Algebra II for the mathematics sequence, and Biology, Chemistry, and Physics for the science sequence. As technology advances, the percentages of students in the mathematics and science sequences must also increase. In a sense, the initial course in each sequence serves as a "gatekeeper" for subsequent courses and, ultimately, opportunities in life. Therefore participation in these courses is vital for education's ability to keep up with society's demands.

Participation Indices

It is difficult to determine a precise number for participation since students may take courses in different grade levels. However, most students tend to take courses in one particular grade. The traditional method for determining participation rates is the following formula:

$$\frac{\text{Number of students enrolled in Xth grade course in Y}}{\text{Number of students enrolled in Xth grade in Y}},$$

where Y is the current year, and X is the grade level in which the largest number of students enrolled in that particular course. Ninth-grade enrollment varies considerably by school system due to the prevalence of retention the first year of high school and the difference in high school structure, e.g., 9-12 and 10-12 organizations. Because eighth grade is generally prior to a high incidence of students dropping out, another measure of participation allows more valid comparisons across subjects. This index, hereafter referred to as Participation Index 1, is as follows:

$$\frac{\text{Number of students enrolled in Xth grade course in Y}}{\text{Number of students enrolled in eighth grade in Y} - (\text{X} - 8)},$$

where X and Y are defined as above. The numerator is the same for both indices. The denominator for the latter index, however, uses enrollment in eighth grade for the year in which the largest number of students currently taking the course statewide were in the eighth grade. This report shall henceforth use this index for North Carolina participation rates unless otherwise stated.

Comparison with Other States

Due to variation among the fifty different educational systems in the United States, it is difficult to compare participation rates of states. As a result, no comprehensive study on this topic exists. However, the State Science/Math Indicators Project sponsored by the Council of Chief State School Officers has estimated state-by-state participation rates for mathematics and science courses for a subset of states that supplied data. Table 1 gives participation rates for southern states providing data, and the range and median for all 38 participating states.

These data show that North Carolina has about the same participation as other states in Algebra II, Biology, and Chemistry, and lower participation in Algebra I and Physics. While the numbers do not take into account course rigor, passing rates, or other variations among states, they do show that states differ according to percentages of students exposed to these mathematics and science courses.

Table 1. Estimated Percentage of Students Taking Selected Mathematics and Science Courses over Four Years of High School: 1989-90

State	Formal Math Level 1 (Algebra)	Formal Math Level 3 (Algebra II)	Biology 1st Year	Chemistry 1st Year	Physics 1st Year
Alabama	70%	46%	95+%	38%	21%
Kentucky	81%	54%	95+%	45%	14%
Louisiana	95+%	64%	90%	50%	21%
Mississippi	85%	58%	95+%	55%	17%
North Carolina	67%	51%	95+%	47%	15%
South Carolina	69%	55%	95+%	51%	16%
Tennessee	79%	54%	88%	42%	11%
Virginia	81%	55%	95+%	57%	23%
Median*	81%	51%	95+%	45%	19%
Range*	52-95+%	29-65%	65-95+%	26-62%	10-36%

*Based on all 38 states that participated in the study.
Source: *State Education Indicators 1990*, Council of Chief State School Officers.

North Carolina Participation in End-of-Course Tests

Participation in the End-of-Course tests is displayed in Table 2. Additionally, the grade level used for calculating participation is given for each subject. Note that for the ninth-grade courses, Participation Index 1 is higher than the traditional index (Participation Index 2). This difference reflects the fact that ninth-grade students, being in the first year of high school, are retained at higher rates. In other subjects taken in higher grades, Participation Index 2 is higher than Participation Index 1 due to the higher incidence of dropout. Note the wide variation in participation rates across subjects – from 12% to 98%.

Table 2. 1990-91 Participation Indices for Ten End-of-Course Subjects

Subject	Typical Grade Level	Participation Index 1	Participation Index 2
Algebra I	9	77.7	73.4
Geometry	10	54.2	58.6
Algebra II	11	43.6	53.4
ELP	9	97.6	92.2
U.S. History	11	80.0	98.0
English I	9	91.8	86.7
Physical Science	9	81.5	77.0
Biology	10	87.7	94.7
Chemistry	11	40.8	50.0
Physics	12	11.5	15.2

Table 3 gives state participation rates for all subjects tested for each year since the tests have been given. In general, participation rates in the selective courses have increased since the tests were implemented. From 1990 to 1991, participation increased in all the selective subjects except one; the rate for Physics did not change.

Figure 1 in Section III graphically shows participation in the initial mathematics sequence course, Algebra I, over the last six years. This increase in Algebra I participation allows more and more students access to higher mathematics courses. Moreover, these students have better chances of developing higher-order thinking skills in these challenging subjects. It is particularly interesting to examine the percent of students entering the accelerated mathematics sequence, taking Algebra I in the eighth grade. Figure 2 shows that each year, a greater percentage of students begins the accelerated mathematics sequence.

Table 3. Participation Indices for End-of-Course Subjects Since 1985-86

	1985-86		1986-87		1987-88		1988-89		1989-90		1990-91		1991-92	
	Number Tested	Participation Index	Number Tested	Participation Index	Number Tested	Participation Index	Number Tested	Participation Index	Number Tested	Participation Index	Number Tested	Participation Index	Number Tested	Participation Index
Algebra I	63330	67.8%	61003	69.1%	59723	70.5%	60183	73.2%	59085	72.3%	60988	77.7%		
Geometry	▨	▨	▨	▨	*field test*	▨	43325	51.1%	43654	53.1%	44325	54.2%		
Algebra II	*field test*	▨	36633	39.6%	36414	39.0%	35132	39.8%	35310	41.7%	35828	43.6%		
ELP	▨	▨	▨	▨	▨	▨	▨	▨	*field test*	▨	76593	97.6%		
U.S. History	▨	▨	*field test*	▨	72824	78.0%	66862	75.8%	64519	76.2%	65767	80.0%		
English I	▨	▨	▨	▨	▨	▨	*field test*	▨	73768	90.3%	72023	91.8%		
English II	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	*field test*	▨		
English III	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨
Physical Science	▨	▨	▨	▨	▨	▨	▨	▨	*field test*	▨	63962	81.5%		
Biology	*field test*	▨	82646	88.5%	77154	87.5%	72898	86.0%	72329	87.9%	71665	87.7%		
Chemistry	▨	▨	▨	▨	*field test*	▨	33352	37.8%	32801	38.7%	33518	40.8%		
Physics	▨	▨	▨	▨	▨	▨	*field test*	▨	10166	11.5%	9711	11.5%		
Healthful Living	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨

Gray areas indicate years prior to test implementation for each subject.
Participation index is based on eighth-grade ADM when most students in the course were in the eighth grade.

Participation in Course Sequences

In addition to examining yearly participation rates, it is important to "track" the flow of students in the courses which comprise the usual mathematics and science sequences. For mathematics, this process is accomplished by comparing the most recent number of students taking the Algebra II test with the number of students taking the previous year's Geometry test and then comparing these students with the number of students taking the Algebra I test two years previous. Analogous comparisons can be made with the science sequence.

Table 4 shows participation in successive mathematics and science courses up through Algebra II and Physics. The percent passing each course is given to use as a base for comparison when looking at participation in the next course in the sequence. The percent taking Algebra I is based on eighth grade enrollment figures for the previous year. Figure 3 shows that participation throughout the mathematics sequence is higher than in the science sequence.

For the mathematics sequence, the percent taking the next course in the typical sequence is lower than the percent passing the previous course. For the science sequence, however, only about half of successful Biology students take Chemistry, and only about one third of passing Chemistry students go on to take Physics. These numbers are similar to previous years' rates.

Table 4. Percentages of Students Taking the Next Course in the Mathematics and Science Sequences

Subject/ Grade Level	Year	Number Tested	Percent Taking Next Course	Percent Passing
Eighth-grade ADM	1987-88	82,250	73.2%	
Algebra I	1988-89	60,183	72.5%	84.7%
Geometry	1989-90	43,654	82.1%	87.2%
Algebra II	1990-91	35,828	–	89.7%
Eighth-grade ADM	1986-87	84,722	86.0%	
Biology	1988-89	72,898	45.0%	87.7%
Chemistry	1989-90	32,801	29.6%	90.6%
Physics	1990-91	9,711	–	96.2%

Factors Affecting Participation

Student participation in the selective mathematics and science courses is determined by a complex set of factors including student attitudes and aspirations; peer influences; counseling; student ability; administrative selection criteria; parental involvement; course availability; expectations of teachers, counselors, and administrators; and community influences. This section will illustrate how participation in these courses varies by grade level in school, sex, ethnic group, parental education, post-high school plans, and school system.

Variations in ***grade levels*** in which students take particular courses generally occur in selective mathematics courses. Some students are on an accelerated track in which they take Algebra I in the eighth grade, Geometry in the ninth, and Algebra II in the tenth. Students who are in this "fast track" not only have opportunities to learn more advanced mathematics at an earlier age but also have opportunities to take additional advanced mathematics courses in their junior and senior years in high school, while those students who take Algebra I in the tenth grade can take no advanced mathematics beyond Algebra II. Students who begin with Algebra I in the ninth grade can take three additional mathematics courses in high school. Participation by grade level in Geometry and Algebra II parallels that established in Algebra I. Table 5 shows Algebra I participation by grade level.

Table 5. 1990-91 Participation in Algebra I by Grade Level

Grade Level	Final ADM	Algebra I Students	Percent of ADM	Percent of Algebra I Students
Eight	81,838	13,161	16.1%	21.6%
Nine	83,057	23,637	28.5%	38.8%
Ten	75,702	17,293	22.8%	28.4%
Eleven	67,081	5,144	7.7%	8.4%
Twelve/Other	63,780	1,753	2.7%	2.9%
Total		60,988		100.1%

The opportunity to participate in the accelerated mathematics sequence varies by school system. Although the number has decreased, ten school systems still did not offer Algebra I to eighth-grade students in 1990-91. However, the percent of eighth-grade students taking Algebra I has generally increased in each school system that offers Algebra I since implementation of the test in 1985-86.

The likelihood of participating in the accelerated mathematics sequence also varies by ethnic group. Figure 4 shows the participation differences among ethnic groups in each grade level for Algebra I. Although 25.4% of Algebra I students are black, only 13.4% of eighth grade Algebra I students are black. Approximately 45.6% percent of eleventh grade Algebra I students are black; these students have begun the mathematics sequence too late in their high school careers to satisfy the three advanced mathematics courses requirement of the University of North Carolina system. Also, among white Algebra I students, 26.0% are in the eighth grade, while only 11.9 percent of black Algebra I students are in the eighth grade.

In Table 6 enrollment in the ten courses is broken down by grade level, sex, ethnicity, parental education, post-high school plans, and anticipated final grade. Figures 5 – 10 give graphical representations of these enrollment patterns.

Except for Physics, ***females*** are overrepresented in the selective mathematics and science courses. Of students in the selective courses, females comprise from 53.8% in Algebra I to 56.0% in Chemistry. For the census courses, the sexes are equally represented as expected. Figure 5 shows the proportions of males and females in each course.

Participation in selective courses varies by ***ethnic group***. Black students represent approximately 30 percent of the school-age population, and, accordingly, about 30 percent of the enrollment in Biology, ELP, English I, Physical Science, and U.S. History. As courses become more advanced, however, black representation decreases. For example, while 28.8% of Biology students are black, only 22.8% of Chemistry students are black, and only 15.4% of Physics students are black. Black students are underrepresented in the selective mathematics and science courses; however, it is interesting that the proportion of blacks in the selective courses has increased somewhat over time. Table 7 gives the proportions of each ethnic group taking the End-of-Course tests for which four years of data are available. Figure 6 shows proportions of ethnic groups in the ten End-of-Course subjects.

Parental education also appears to have an impact on participation in selective mathematics and science courses. In the general courses, between 55.0% and 61.2% of students reported having one or more parents with education beyond high school. The range for the selective courses is from 65.8% for Algebra I to 82.2% for Physics. Generally, as courses become more selective, the percentage of students who have at least one parent educated beyond high school increases. Figure 7 shows proportions of parental education levels for each course.

Another variable that is related to participation is self-reported ***post-high school plans***. As expected, the selective courses have a higher percentage of students planning to attend a four-year college than the general courses. While approximately half of the students in all the general courses plan to attend a four-year college, more than 70% of Algebra II and Chemistry students, and nearly 85% of Physics students plan to attend a four-year college. Among the census courses, around five percent of students plan to seek employment, and an additional eight percent plan to enlist in military service. In the later, more selective courses, students become more decided about their plans, as seen in Figure 8.

Furthermore, post-high school plans vary by ethnic group. Figure 9 shows the percentages of black and white students in each course with various post-high school plans. On average, blacks and whites plan to attend four-year colleges at similar rates within subjects. However, whites plan to attend community colleges more than blacks, and enlist in military service less than blacks. In all courses, whites are more undecided about post-high school plans than blacks.

Except for the highly selective Physics course, statewide ***grading patterns*** are consistent across high school subjects, as Figure 10 displays. Algebra I has a high percentage of *F*s, reflecting its screening function for other courses. There is a slight tendency for there to be fewer *F*s as selectiveness increases. However, even though only a more selective 45% of Biology students take Chemistry, similar percentages fail each course – 8.7% for Chemistry and 11.3% for Biology.

Finally, participation varies by ***school system***. For example, Algebra I participation rates for school systems in 1990-91 range from an estimated 31.9% to 100.0%. While the median participation index for Algebra I is about 75, ten percent of school systems had an index under 62, and ten percent had an index over 92. Participation indices for mathematics and science sequences are listed by school system in Section V. Participation indices for all subjects are also listed in Section V, and are displayed graphically in Figure 11.

Note: Caution should be used when interpreting participation rates, which may exceed 100 percent. No method of estimating participation rates can incorporate all factors determining percentages of students taking a particular course. The participation rates presented in this document may be affected by fluctuations in either the number of students taking the course or eighth-grade enrollment, especially in smaller school systems. Furthermore, policy changes at the local level may affect the participation rates, for example, changing the grade level in which most students take a course.

Table 6. Characteristics and Average Performance of Students Taking Each Course

	Algebra I				Geometry			
	N	Percent	Average Core	Percent Correct	N	Percent	Average Core	Percent Correct
All Students	60,988	100.0	41.1	68.5	44,325	100.0	38.8	64.7
Grade Level								
8	13,161	21.7	47.6	79.4	88	0.2	56.1	93.4
9	23,637	39.0	42.2	70.3	9,520	21.6	47.2	78.7
10	17,293	28.6	36.9	61.4	20,123	45.6	39.3	65.5
11	5,144	8.5	34.7	57.9	11,398	25.8	32.8	54.7
12	1,326	2.2	34.6	57.6	2,989	6.8	31.0	51.6
Sex								
Male	27,951	46.2	40.7	67.8	19,819	45.1	39.8	66.3
Female	32,517	53.8	41.4	69.1	24,120	54.9	38.0	63.3
Ethnic Group								
American Indian	910	1.5	37.3	62.1	507	1.2	33.8	56.4
Black	15,436	25.6	37.4	62.4	10,349	23.6	33.0	55.0
White	42,498	70.6	42.4	70.7	31,702	72.4	40.7	67.8
Other	1,371	2.3	43.4	72.3	1,229	2.8	41.6	69.3
Parental Education								
Less than eighth grade	451	0.8	38.5	64.2	244	0.6	35.4	59.0
Eighth to twelfth grade	4,790	8.0	37.8	63.0	2,296	5.3	34.5	57.4
High school graduate	15,267	25.5	39.2	65.4	9,332	21.4	36.0	59.9
More than high school	39,443	65.8	42.3	70.5	31,790	72.8	40.0	66.7
Post high school plans								
Seek employment	1,339	2.2	36.0	60.0	538	1.2	34.1	56.8
Military service	3,467	5.8	36.8	61.3	1,752	4.0	34.3	57.2
Trade/Business school	1,174	2.0	36.2	60.3	657	1.5	33.5	55.9
Community/Tech. college	8,260	13.8	36.9	61.5	6,029	13.8	33.2	55.3
Private junior college	632	1.1	37.5	62.4	562	1.3	33.8	56.4
Four-year college	36,253	60.4	43.4	72.4	29,666	67.9	40.8	68.0
Undecided	7,356	12.3	39.1	65.1	3,778	8.6	36.9	61.4
Other	1,542	2.6	38.6	64.3	719	1.6	37.7	62.8
Anticipated Final Grade								
A	8,197	13.5	50.7	84.6	5,917	13.4	50.6	84.3
B	15,121	25.0	45.9	76.4	10,656	24.1	44.2	73.6
C	16,603	27.4	41.0	68.3	12,349	27.9	37.8	63.1
D	12,187	20.1	36.2	60.4	10,017	22.6	33.0	55.1
F	8,399	13.9	30.0	50.1	5,327	12.0	28.1	46.8

Table 6 cont'd.

	Algebra II				ELP			
	N	Percent	Average Core	Percent Correct	N	Percent	Average Core	Percent Correct
All Students	35,828	100.0	38.8	69.2	76,593	100.0	41.7	62.2
Grade Level								
8	10	0.0	52.8	94.3	17	0.0	30.6	45.7
9	387	1.1	45.2	80.7	67,371	88.0	41.7	62.2
10	9,936	27.8	44.8	80.0	5,173	6.8	39.3	58.7
11	16,677	46.7	38.1	68.1	1,509	2.0	44.0	65.7
12	8,682	24.3	32.8	58.6	2,449	3.2	46.0	68.7
Sex								
Male	15,811	44.5	38.9	69.5	38,367	50.2	41.5	62.0
Female	19,752	55.5	38.6	69.0	38,123	49.8	41.8	62.5
Ethnic Group								
American Indian	422	1.2	34.9	62.2	1,399	1.8	36.0	53.7
Black	7,732	21.8	34.6	61.8	22,363	29.3	36.1	53.9
White	26,246	74.1	39.9	71.2	50,910	66.7	44.3	66.1
Other	1,022	2.9	42.8	76.5	1,709	2.2	42.0	62.7
Parental Education								
Less than eighth grade	176	0.5	35.9	64.1	957	1.3	33.6	50.1
Eighth to twelfth grade	1,532	4.3	35.6	63.5	8,969	12.0	35.1	52.3
High school graduate	6,983	19.7	36.8	65.6	22,159	29.5	38.4	57.2
More than high school	26,736	75.5	39.5	70.5	42,963	57.2	45.2	67.4
Post high school plans								
Seek employment	361	1.0	34.6	61.8	3,845	5.1	33.8	50.4
Military service	1,160	3.3	34.7	61.9	6,074	8.1	37.3	55.6
Trade/Business school	403	1.1	33.6	60.1	1,779	2.4	37.1	55.4
Community/Tech. college	4,947	13.9	33.9	60.5	10,012	13.3	38.7	57.8
Private junior college	593	1.7	33.2	59.4	555	0.7	42.0	62.6
Four-year college	25,454	71.8	40.3	72.0	38,271	50.9	45.9	68.5
Undecided	2,195	6.2	37.3	66.6	11,682	15.5	38.0	56.7
Other	354	1.0	37.1	66.2	2,988	4.0	36.1	53.9
Anticipated Final Grade								
A	5,430	15.2	47.8	85.3	10,536	13.8	52.2	77.9
B	9,121	25.6	42.7	76.2	17,796	23.4	47.0	70.1
C	10,150	28.5	37.8	67.5	21,492	28.2	41.6	62.1
D	7,231	20.3	33.8	60.3	16,234	21.3	36.2	54.0
F	3,687	10.4	28.2	50.4	10,069	13.2	30.3	45.3

Table 6 cont'd.

	U.S. History				English I			
	N	Percent	Average Core	Percent Correct	N	Percent	Average Core	Percent Correct
All Students	65,750	100.0	40.1	66.8	72,023	100.0	66.2	66.2
Grade Level								
8					13	0.0	49.5	49.5
9	238	0.4	37.8	62.9	71,133	99.3	66.3	66.3
10	1,833	2.8	36.1	60.1	444	0.6	54.9	54.9
11	57,938	88.5	40.4	67.4	45	0.1	55.6	55.6
12	5,453	8.3	38.1	63.5	30	0.0	65.0	65.0
Sex								
Male	32,320	49.5	41.0	68.4	35,346	49.5	62.9	62.9
Female	33,028	50.5	39.2	65.4	36,004	50.5	69.6	69.6
Ethnic Group								
American Indian	1,070	1.6	36.5	60.9	1,337	1.9	56.7	56.7
Black	18,652	28.6	35.6	59.3	20,587	29.0	58.6	58.6
White	43,947	67.4	42.1	70.1	47,746	67.2	69.8	69.8
Other	1,541	2.4	41.4	68.9	1,420	2.0	67.7	67.7
Parental Education								
Less than eighth grade	683	1.1	34.7	57.9	855	1.2	52.6	52.6
Eighth to twelfth grade	6,615	10.3	34.6	57.7	8,386	11.9	56.6	56.6
High school graduate	17,694	27.4	37.5	62.5	20,925	29.7	61.6	61.6
More than high school	39,503	61.2	42.5	70.8	40,266	57.2	71.3	71.3
Post high school plans								
Seek employment					3,404	4.8	52.1	52.1
Military service					5,434	7.7	56.6	56.6
Trade/Business school					1,521	2.2	58.0	58.0
Community/Tech. college					8,668	12.3	61.2	61.2
Private junior college					445	0.6	65.1	65.1
Four-year college					37,220	52.7	73.1	73.1
Undecided					11,076	15.7	60.9	60.9
Other					2,839	4.0	56.4	56.4
Anticipated Final Grade								
A	8,058	12.3	49.1	81.8	7,997	11.2	82.7	82.7
B	15,396	23.5	44.5	74.1	18,461	25.8	74.1	74.1
C	20,238	30.9	39.8	66.3	22,249	31.1	65.7	65.7
D	15,213	23.3	35.4	58.9	14,918	20.9	57.7	57.7
F	6,505	9.9	30.7	51.2	7,917	11.1	48.8	48.8

Table 6 cont'd.

	Physical Science				Biology			
	N	Percent	Average Core	Percent Correct	N	Percent	Average Core	Percent Correct
All Students	63,962	100.0	39.9	58.7	71,665	100.0	41.1	62.2
Grade Level								
8	516	0.8	49.2	72.3				
9	56,955	89.1	40.0	58.9	8,246	11.6	46.5	70.4
10	2,929	4.6	37.7	55.4	58,025	81.3	40.8	61.7
11	2,363	3.7	37.7	55.4	3,770	5.3	36.0	54.5
12	1,142	1.8	39.6	58.3	1,337	1.9	36.9	55.9
Sex								
Male	32,142	50.3	40.9	60.2	35,076	49.3	41.2	62.5
Female	31,745	49.7	38.9	57.2	36,026	50.7	40.9	62.0
Ethnic Group								
American Indian	1,332	2.1	35.0	51.5	1,192	1.7	37.9	57.4
Black	19,910	31.2	34.6	51.0	20,437	28.8	35.7	54.1
White	41,345	64.8	42.6	62.6	47,606	67.2	43.4	65.8
Other	1,214	1.9	40.2	59.2	1,611	2.3	42.3	64.1
Parental Education								
Less than eighth grade	800	1.3	32.9	48.4	729	1.0	34.8	52.7
Eighth to twelfth grade	8,005	12.8	34.2	50.3	7,580	10.8	35.0	53.0
High school graduate	19,336	30.9	37.3	54.8	19,764	28.1	38.0	57.6
More than high school	34,420	55.0	43.1	63.3	42,284	60.1	43.9	66.5
Post high school plans								
Seek employment	3,317	5.3	33.5	49.3	3,341	4.7	34.4	52.1
Military service	5,229	8.3	36.6	53.8	5,423	7.7	36.6	55.5
Trade/Business school	1,530	2.4	35.5	52.1	2,057	2.9	36.7	55.5
Community/Tech. college	8,896	14.2	37.2	54.7	12,212	17.3	37.9	57.4
Private junior college	495	0.8	38.9	57.3	646	0.9	39.7	60.1
Four-year college	30,609	48.8	43.7	64.2	34,714	49.3	45.1	68.4
Undecided	10,101	16.1	37.2	54.7	9,822	13.9	38.1	57.7
Other	2,580	4.1	35.0	51.5	2,199	3.1	36.7	55.6
Anticipated Final Grade								
A	6,821	10.7	51.0	74.9	7,755	10.9	50.4	76.3
B	14,361	22.6	45.1	66.3	17,135	24.1	45.7	69.3
C	18,542	29.2	39.9	58.7	21,783	30.6	41.0	62.1
D	14,569	22.9	35.6	52.3	16,409	23.0	36.5	55.3
F	9,312	14.6	30.6	45.1	8,147	11.4	31.9	48.4

Table 6 cont'd.

	Chemistry				Physics			
	N	Percent	Average Core	Percent Correct	N	Percent	Average Core	Percent Correct
All Students	33,337	100.0	40.1	66.8	9,735	100.0	39.4	65.7
Grade Level								
8								
9	14	0.0	44.9	74.9				
10	4,460	13.4	45.0	75.1	22	0.2	46.5	77.5
11	22,909	69.0	40.1	66.9	1,538	15.8	42.0	70.0
12	5,831	17.6	36.2	60.4	8,145	83.9	38.9	64.9
Sex								
Male	14,570	44.0	41.4	69.0	5,228	54.1	41.3	68.9
Female	18,523	56.0	39.1	65.1	4,444	45.9	37.2	62.0
Ethnic Group								
American Indian	381	1.2	37.1	61.9	85	0.9	35.6	59.4
Black	7,518	22.8	35.3	58.9	1,484	15.4	34.1	56.8
White	24,033	72.9	41.6	69.3	7,634	79.2	40.4	67.4
Other	1,015	3.1	41.9	69.8	432	4.5	40.8	68.0
Parental Education								
Less than eighth grade	162	0.5	36.4	60.7	48	0.5	38.7	64.5
Eighth to twelfth grade	1,389	4.2	36.0	60.1	235	2.4	35.2	58.6
High school graduate	6,284	19.1	37.6	62.7	1,434	14.8	36.9	61.5
More than high school	25,124	76.2	41.0	68.3	7,948	82.2	40.0	66.7
Post high school plans								
Seek employment	247	0.7	34.9	58.1	40	0.4	38.7	64.4
Military service	1,016	3.1	36.7	61.1	245	2.5	36.8	61.3
Trade/Business school	338	1.0	35.4	58.9	51	0.5	33.3	55.5
Community/Tech. college	4,274	12.9	35.3	58.8	753	7.8	34.8	58.0
Private junior college	487	1.5	36.1	60.2	112	1.2	35.5	59.2
Four-year college	24,531	74.0	41.5	69.1	8,185	84.7	40.1	66.8
Undecided	1,910	5.8	38.0	63.3	183	1.9	38.1	63.6
Other	351	1.1	39.0	65.1	97	1.0	39.3	65.5
Anticipated Final Grade								
A	4,568	13.7	48.2	80.3	2,067	21.3	45.0	74.9
B	8,837	26.4	43.4	72.3	3,227	33.2	40.4	67.4
C	10,340	30.9	39.0	64.9	2,824	29.1	37.5	62.6
D	6,768	20.2	35.6	59.3	1,224	12.6	34.4	57.3
F	2,937	8.8	32.1	53.5	369	3.8	30.9	51.5

Table 7. Proportions of Ethnic Groups Taking End-of-Course Tests from 1985-86 to 1990-91

	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91
Algebra I						
American Indian	1.4	1.4	1.3	1.3	1.4	1.5
Black	23.4	24.7	26.2	26.2	25.5	25.6
White	73.9	72.4	71.0	70.7	70.7	70.6
Other	1.3	1.5	1.6	1.8	2.3	2.3
Algebra II						
American Indian	–	1.0	1.0	1.0	0.9	1.2
Black	–	17.7	19.0	19.9	21.5	21.8
White	–	79.5	78.1	76.8	75.0	74.1
Other	–	1.7	1.9	2.3	2.6	2.9
Biology						
American Indian	–	1.5	1.6	1.6	1.8	1.7
Black	–	28.3	29.0	29.8	29.0	28.8
White	–	69.0	67.9	66.8	67.2	67.2
Other	–	1.2	1.5	1.7	2.0	2.3
U.S. History						
American Indian	–	–	1.5	1.6	1.5	1.6
Black	–	–	28.4	28.5	29.2	28.6
White	–	–	68.7	68.2	67.2	67.4
Other	–	–	1.4	1.7	2.1	2.4

Performance

For the End-of-Course tests, performance is the most basic measure of a group's achievement. In this report, two measures of performance are used – the average core score and the average percent correct. Both measures of performance are based on the average number of core test items answered correctly by students in a particular group. The core score reports average number of core items answered correctly; however, since different End-of-Course tests have different numbers of core test items, the average percent correct, core score divided by total number of core items, is used for across-subject comparisons.

Although average scores do not exist for other states, average North Carolina scores are useful for examining trends over time, differences across subjects, and subgroup comparisons. These topics are discussed in this section. For reference, Table 6 gives North Carolina's 1990-91 average scores on the End-of-Course tests broken down by subgroups, and Table 8 gives scores over time.

Trends Over Time

Performance, which, unlike participation, is pertinent to all ten End-of-Course tests, not just the selective courses, has increased on all tests since their implementation. Furthermore, 1990-91 scores were higher than 1989-90 scores in all subjects except U.S. History. Table 8 gives the average state scores on each End-of-Course test for every year each test has been given. Since many of the tests have been implemented only recently, strong trends may not be evident with those tests.

Figures 12 and 13 show scores over time for Algebra I and Biology, respectively. As indicated earlier, scores have steadily increased. The horizontal lines represent average core scores attained by students achieving each anticipated final grade in the base years of 1985-86 for Algebra I and 1986-87 for Biology. On the base scales, the average 1990-91 student scored at a *B*– level in Algebra I and a *B*- or *C*+ level in Biology. Other subjects have progressed in a similar manner. Note that while average scores have increased, participation rates have also increased, as shown in Figure 1.

Differences Across Subjects

As an examination of Table 8 will reveal, average statewide percent correct scores on the ten End-of-Course tests range from 58.7 for Physical Science to 69.2 for Algebra II. Performance across subjects is not necessarily related because very different groups of students may take the tests; however, percent correct seems to be fairly consistent across subjects. Furthermore, once an average statewide score has been established, changes in scores across subjects should be comparable.

Table 8. Average Core Scores for End-of-Course Subjects Since 1985-86

	1985-86		1986-87		1987-88		1988-89		1989-90		1990-91		1991-92	
	Average Core	Percent Correct	Average Core	Percent Correct	Average Core	Percent Correct	Average Core	Percent Correct	Average Core	Percent Correct	Average Core	Percent Correct	Average Core	Percent Correct
Algebra I	37.7	62.9%	39.2	65.3%	39.2	65.3%	39.8	66.4%	40.6	67.7%	41.1	68.5%		
Geometry					*field test*		37.5	62.6%	38.4	64.0%	38.8	64.7%		
Algebra II	*field test*		37.7	67.2%	36.2	64.6%	37.6	67.2%	37.4	66.8%	38.8	69.2%		
ELP									*field test*		41.7	62.2%		
U.S. History			*field test*		39.9	66.5%	42.0	70.0%	42.2	70.3%	40.1	66.8%		
English I							*field test*		64.3	64.3%	66.2	66.2%		
English II											*field test*			
English III														
Physical Science									*field test*		39.9	58.7%		
Biology	*field test*		38.0	57.6%	39.0	59.1%	39.2	59.4%	40.4	61.2%	41.1	62.2%		
Chemistry					*field test*		37.5	62.5%	38.5	64.1%	40.1	66.8%		
Physics							*field test*		38.3	63.9%	39.4	65.7%		
Healthful Living														

Gray areas indicate years prior to test implementation for each subject.

Comparisons of Subgroups

Performance varies among various subgroups. Scores, in terms of core score and percent correct on the End-of-Course tests, and percentages in the various subgroups, are displayed in Table 6. This section discusses score differences among subgroups.

The largest score differences for students across ***grade levels*** occur in the courses in which students are in different tracks. For example, eighth-grade students taking Algebra I are those students who generally excel; therefore, they tend to score higher than those students who take Algebra I in the ninth grade. The score difference is even greater when eighth-grade Algebra I students' scores are compared to the scores of tenth- or eleventh-grade Algebra I students. Naturally, this effect continues throughout the entire mathematics sequence. A similar, yet less marked, pattern occurs in the science sequence. For the general courses, the relationship is not as evident.

Large average score differences by ***sex*** occur in English I and Physics. In general, females score higher on English I while males tend to score higher on Physics. Males have smaller score advantages on the Geometry, Physical Science, Chemistry, and U.S. History tests. In the remaining subjects, scores for males and females were similar. Figure 14 displays average scores achieved by the two sexes.

Average scores also differ by ***ethnic group***. On the 1990-91 tests, whites and "other" students scored higher on all ten End-of-Course tests than did blacks and American Indians. The differences between average scores for black and white students, however, narrowed slightly in four of the eight subjects from 1989-90 to 1990-91, and narrowed over all subjects. Figure 15 shows scores for ethnic groups for all subjects.

Parental education level differences on End-of-Course tests are similar to those typically found on other tests, with higher scores generally associated with higher parental education levels. The most profound difference among the four levels is for those students reporting a parent with education beyond high school. This group's average score is significantly higher than the other groups' scores over all subjects. The difference generally becomes smaller the more selective a course is. Figure 16 shows scores according to parental education level for all subjects.

Students in all courses except U.S. History were asked to record their ***post-high school plans***. As expected, for all subjects, the average scores of those students who plan to go to a four-year college are higher than for students with other plans. Figure 17 shows the average scores for groups of students with the same post-high school plans for all subjects.

At the time of test administration, teachers recorded the final grades they anticipated giving students. The average scores for all subjects by ***anticipated final grade*** are given in Figure 18. There is a consistent pattern that as the grade in the course increases, average test scores increase. This pattern is an indication of ***test validity*** in that the results parallel the grading practices of teachers across the state for student work over the course of the school year.

Although there are consistent differences in the average scores of different grade groups, scores for students in the same grade group vary widely. Figure 19 shows variations in scores for each grade received by Algebra I students. This range of scores reflects differences in ***grading standards*** across tracks, teachers, schools, and school systems. As Figure 20 shows, over time, scores for each grade group have increased along with the general group, indicating that grading standards for students have become more stringent.

Finally, scores on the End-of-Course tests vary by ***school system***. Section V reports average scores for each school system. The widest variations in performance occur in the selective mathematics and science courses. In the general subjects, school systems tend to differ less. Figure 21 displays the distribution of scores achieved by the school systems on all subjects.

Some of the variation in End-of-Course scores can be accounted for by the differences in the ability levels of the students, as evidenced in the 0.55 correlation between average Algebra I core scores and average eighth-grade CAT scores over all school systems. Figure 22 shows this general decrease in Algebra I scores as scores on the CAT decrease. However, systems with low ability levels can have successful courses and produce students with above average End-of-Course achievement. Gates County, for example, scored much lower than average on the 1990 CAT, but ranks in the top third of school systems in terms of Algebra I average core score.

Figure 23 graphs Algebra I participation and performance, grouping school systems by five-point CAT score intervals. This graph shows that school systems that have similar CAT scores do not necessarily have similar participation or scores on the selective Algebra I course. Furthermore, high participation in selective courses does not ensure school systems of lower average scores, as evidenced by school systems scoring higher than the state average and with participation rates higher than the state average.

Yield

Yield Indices

Since selective mathematics and science courses are not taken by all students, overall performance in these subjects may be related to participation within school systems or within the state. For example, if only the top 20 percent of students take a course, scores will necessarily be higher than if the top 50 percent take the course. ***Yield*** is an index of the effectiveness of a program which takes into account both participation and performance. It is based on a concept presented in *The Underachieving Curriculum* and suggests that indices of program effectiveness should reflect not only "what students know" but also "how many know it."[1] Yield is calculated for all selective courses by multiplying the participation in a course by the average percent correct of core test items answered correctly and then multiplying by 100. Yield would be 100 percent if all students took a course and all students achieved a perfect score.

Another yield statistic, ***effective yield***, counts as participating only those students who pass the course as estimated by a certain cutoff score. Therefore, just increasing the numbers of students taking courses and the associated End-of-Course tests will not necessarily increase this statistic; they must also perform at a passing level. Effective yield is calculated as yield times percent passing. The scores used to determine passing cutoffs are based on the percentages of students with anticipated final grades of *F* in the first year each End-of-Course test was implemented.

North Carolina Yields on End-of-Course Tests

There is no information unique to yield statistics. However, yield is an easy way to to combine two separate measures – participation and performance – to provide a general measure of the effectiveness of educational programs. Table 9 gives yields for the selective tests (since participation is relevant only to the selective courses) for each year since each test's implementation. Since participation and average score increased from 1989-90 to 1990-91 in nearly every subject, yield and effective yield also increased. Figure 1 shows trends for participation, average percent correct, yield, and effective yield for Algebra I since implementation.

Table 10 gives system-level correlations of the End-of-Course tests among themselves, with each subtest of the eighth-grade California Achievement Test (CAT), and with mathematical and verbal subtest yields of the Scholastic Aptitude Test (SAT). Although cohort changes are not taken into account, at the system level there are fairly strong correlations within End-of-Course tests with the exception of the first-year Physical Science test. Again, with the exception of Physical Science, the End-of-Course tests are highly correlated with the CAT and the SAT. Yields, as well as participation rates and scores, for all 133 North Carolina school systems are listed in Section V.

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[1] Curtis Mcknight, et al., *The Underachieving Curriculum: Assessing U.S. School Mathematics from an International Perspective*. International Association for the evaluation of Education Achievement, Stipes Publishing Company, Champaign, IL, 1987. McKnight did not quantify yield. The suggestion for quantifying yield as described above was made by Randy Harter, Mathematics Supervisor for Buncombe County Schools. He also suggested the effective yield.

Table 9. Yield and Effective Yield for Selective Courses Since 1985-86

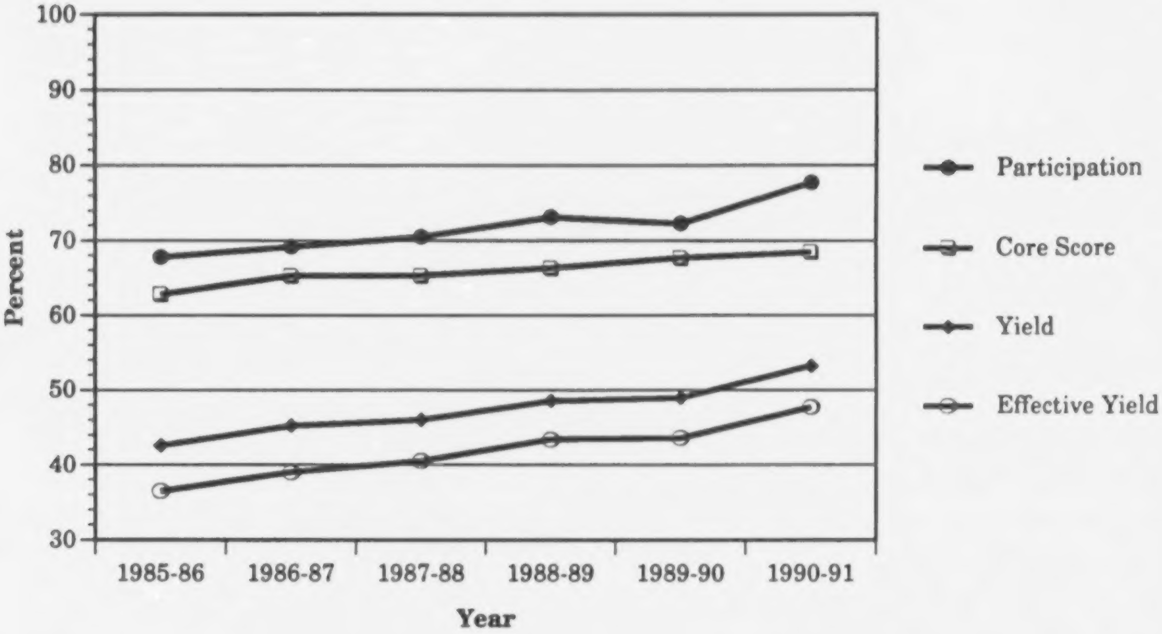
	Algebra 1		Geometry		Algebra II		Chemistry		Physics	
	Yield	Effective Yield	Yield	Effective Yield	Yield	Effective Yield	Yield	Effective Yield	Yield	Effective Yield
1985-86	42.6	36.6	–	–	–	–	–	–	–	–
1986-87	45.2	39.1	–	–	–	–	–	–	–	–
1987-88	46.0	40.5	–	–	25.2	21.7	–	–	–	–
1988-89	48.6	43.4	32.0	28.4	26.8	24.9	23.6	21.7	–	–
1989-90	48.9	43.6	34.0	30.8	27.8	24.5	24.8	23.1	7.4	7.1
1990-91	53.2	47.7	35.1	31.2	30.1	28.4	27.2	25.9	7.5	7.3

Table 10. Correlations of 133 School Systems' 1990-91 End-of-Course Effective Yields within Subjects, with 1989-90 Average Eighth-Grade CAT Scores, and with 1990-91 SAT Yields

	Algebra I	Geometry	Algebra II	ELP	U.S. History	English I	Physical Science	Biology	Chemistry	Physics
Algebra I	1.00									
Geometry	0.54	1.00								
Algebra II	0.61	0.66	1.00							
ELP	0.51	0.51	0.47	1.00						
U.S. History	0.52	0.56	0.55	0.43	1.00					
English I	0.62	0.66	0.59	0.71	0.65	1.00				
Physical Science	0.38	0.30	0.28	0.34	0.32	0.39	1.00			
Biology	0.55	0.66	0.61	0.61	0.58	0.72	0.27	1.00		
Chemistry	0.57	0.72	0.74	0.41	0.58	0.57	0.17	0.52	1.00	
Physics	0.49	0.62	0.59	0.37	0.44	0.45	0.23	0.46	0.71	1.00
CAT Reading	0.59	0.60	0.53	0.57	0.51	0.70	0.33	0.63	0.55	0.39
Language	0.56	0.56	0.47	0.52	0.44	0.69	0.36	0.59	0.52	0.37
Mathematics	0.60	0.55	0.43	0.53	0.39	0.64	0.35	0.56	0.50	0.40
SAT Verbal Yield	0.60	0.65	0.76	0.51	0.50	0.56	0.13	0.55	0.69	0.62
Mathematics Yield	0.61	0.66	0.76	0.50	0.53	0.56	0.15	0.56	0.71	0.64

Section III : Graphical Results

Figure 1. Participation, Average Score, Yield, and Effective Yield for Algebra I: 1985-86 – 1990-91



Observations:

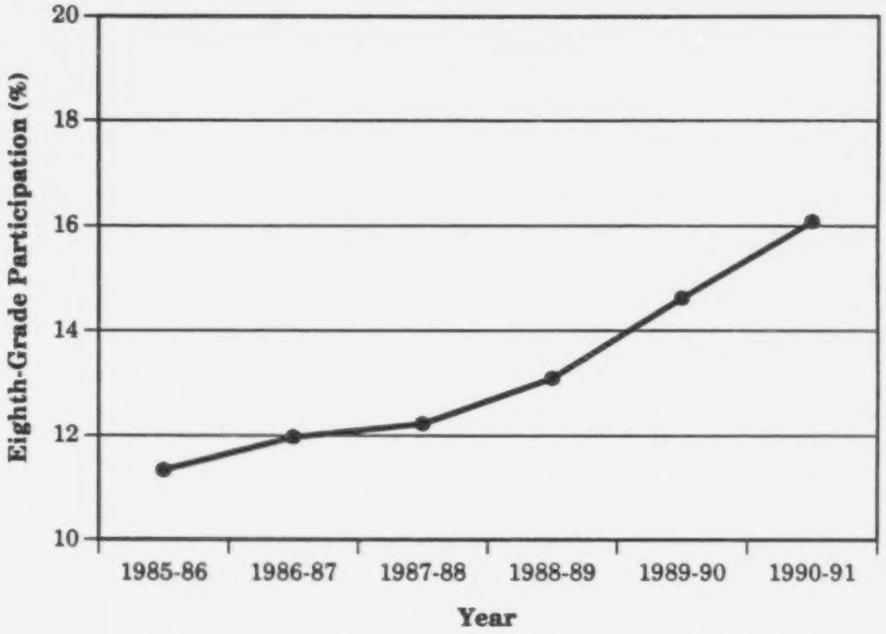
- Since the initial administration in 1985-86, participation and average scores have increased, thus increasing yield and effective yield.
- Gains not only in participation, but also in score, indicate that the additional Algebra I students are capable of performing at acceptable levels.

Notes:

Yield is an index of the effectiveness of a program which takes into account both participation and score. It is calculated by multiplying the participation in a course by the average percent of core test items answered correctly. Yield would be 100 if all students took a course and made perfect scores. Effective yield is similar to yield, but counts as participating only those students who achieve above a cutoff score estimating they will pass the course.

Data Source: Tables 3 and 8.

Figure 2. Eighth-Grade Participation in Algebra I: 1985-86 – 1990-91



Observations:

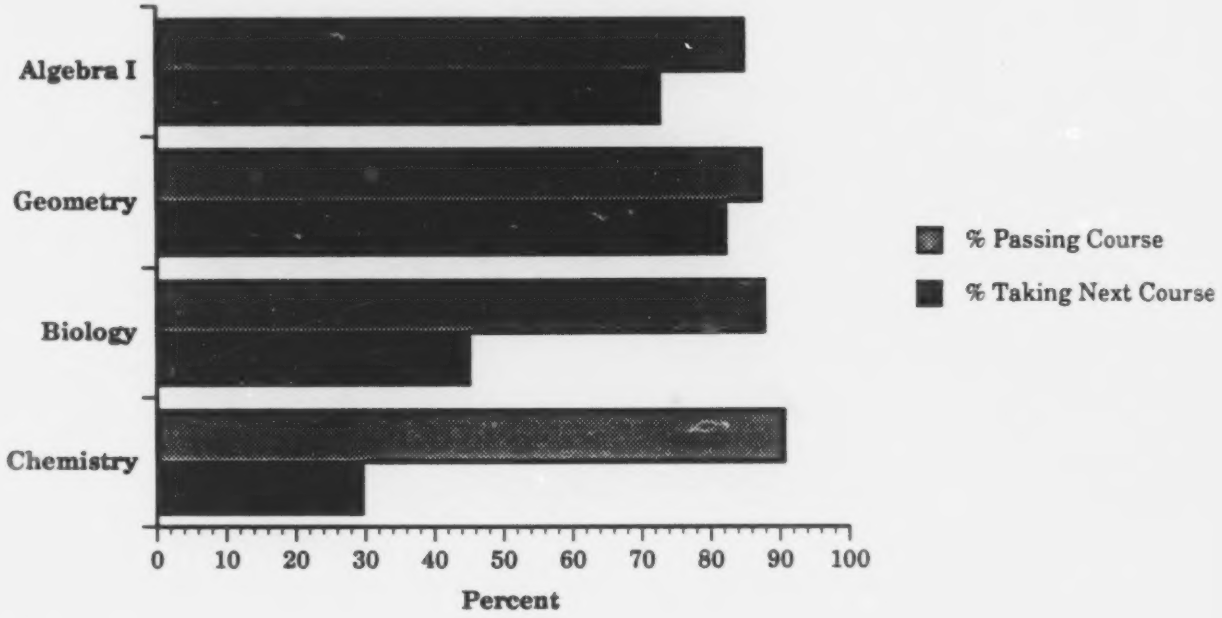
- Eighth-grade participation in Algebra I, the initial course in the mathematics sequence, has increased by 42% since the initial administration in 1985-86.
- As more students take Algebra I in the eighth grade, more students have the prerequisites for, and ultimately take, higher mathematics courses, exposing them to important higher-order thinking skills.

Notes:

Eighth-grade participation is determined by dividing the number of eighth-grade test takers by eighth-grade enrollment for the same year.

Data Source: not in text.

Figure 3. Percentages of Students Taking the Next Course in the Mathematics and Science Sequences



Observations:

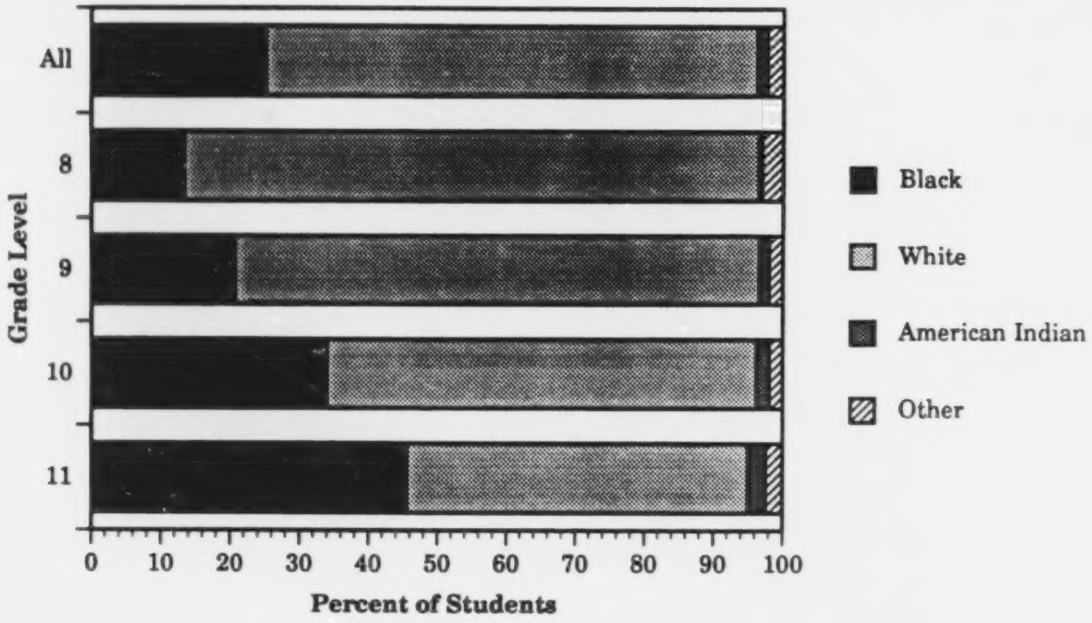
- The percentage of students taking the next course in the mathematics sequence is slightly lower than the percentage passing the previous course.
- The percentage of students taking the next course in the science sequence is dramatically lower than the percentage passing, or even achieving a *C* in, the previous course.
- About half of successful Biology students go on to take Chemistry, and about one third of Chemistry students go on to take Physics.

Note:

The typical mathematics sequence is Algebra I – Geometry – Algebra II.
The typical science sequence is Biology – Chemistry – Physics.

Data Source: Table 4.

Figure 4. Percent of Algebra I Students by Grade Level and Ethnic Group

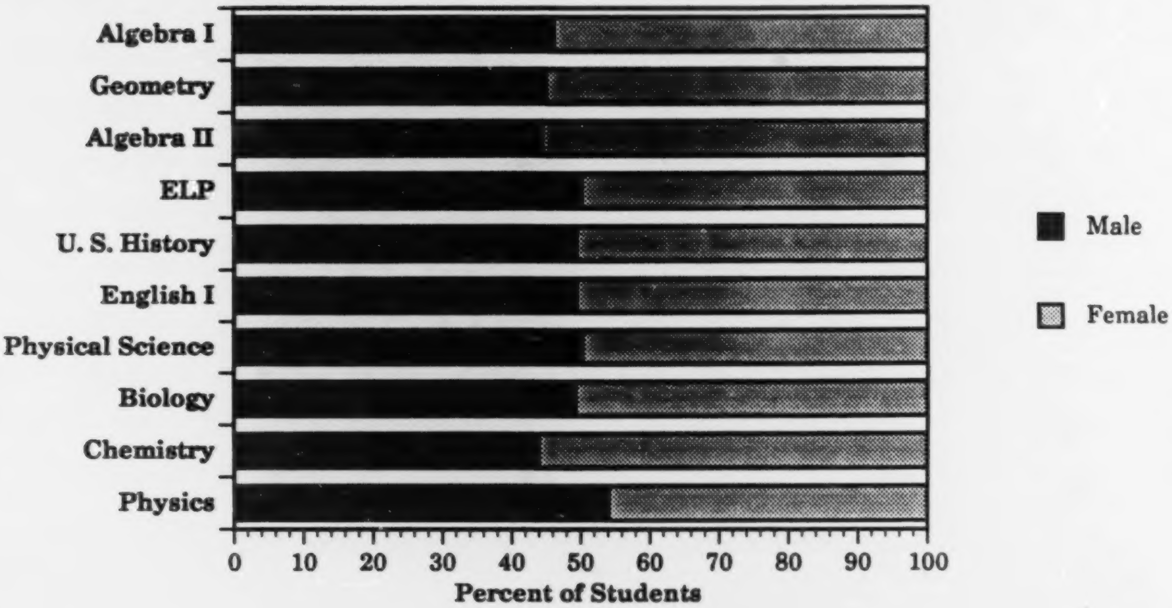


Observations:

- Whites and "other" students are overrepresented in eighth-grade Algebra I participation, whereas the percentages of white and black eleventh-grade Algebra I students are about even.

Data Source: not in text.

Figure 5. Percent of Students in Each Course by Sex

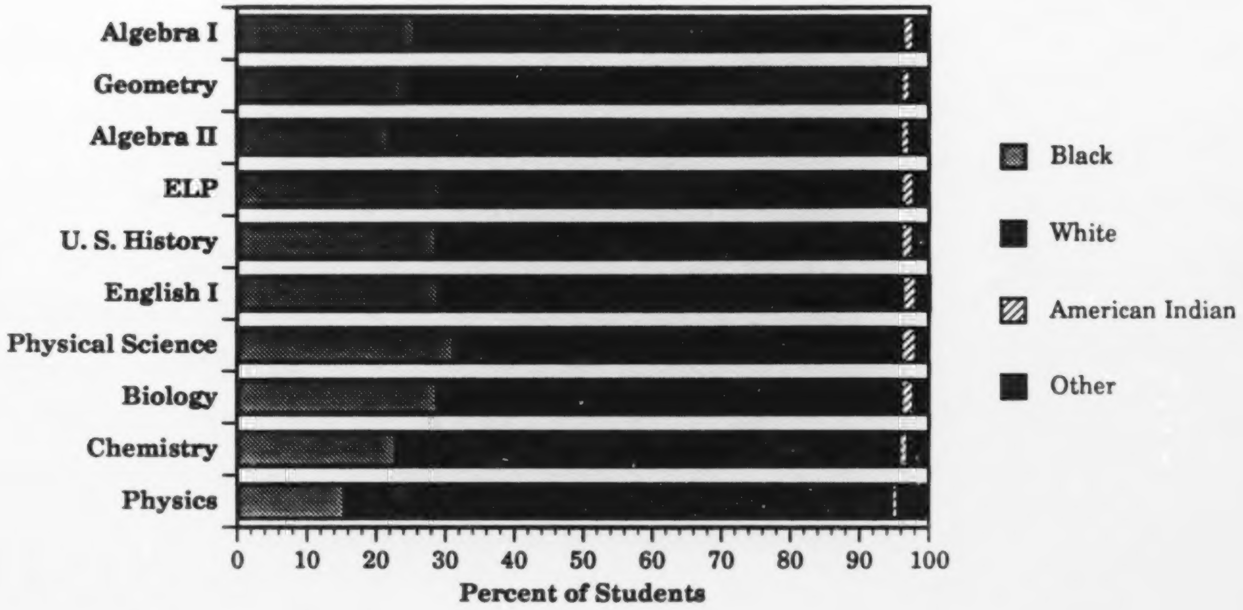


Observations:

- For the selective courses, except Physics, females are overrepresented. There are more males, however, taking Physics.
- In the general courses, males and females are equally represented.

Data Source: Table 6.

Figure 6. Percent of Students in Each Course by Ethnic Group

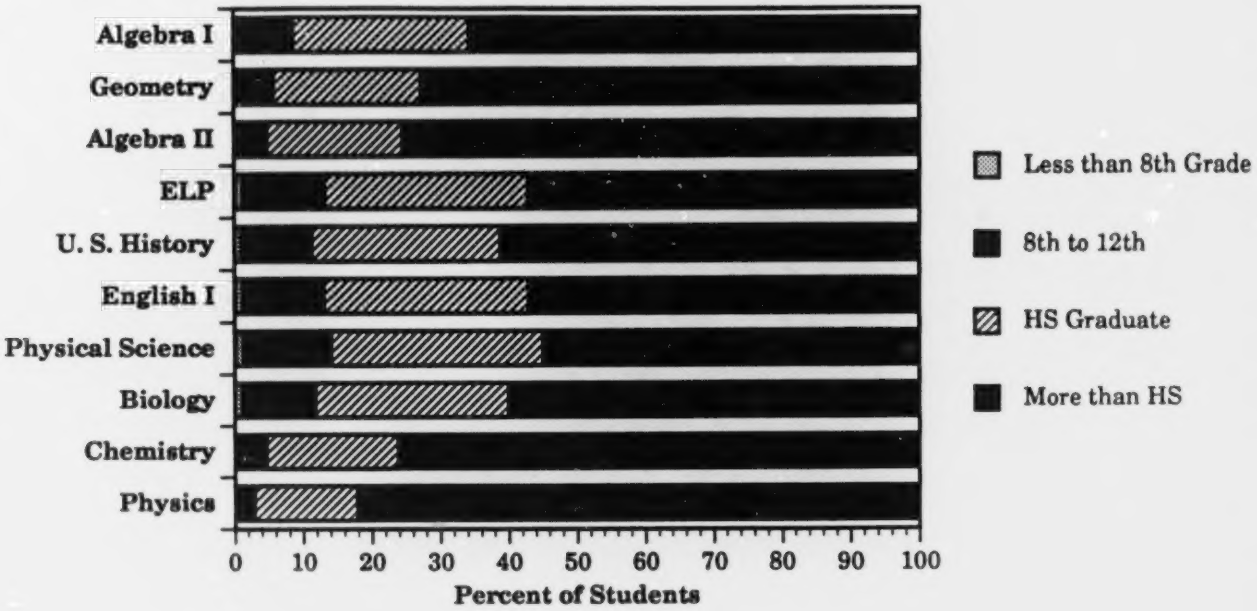


Observations:

- For the general courses, the ethnic groups are proportionately represented.
- For the selective courses, blacks are underrepresented; as selectiveness increases, fewer and fewer black students are enrolled.
- "Other" students are overrepresented in the selective courses.

Data Source: Table 6.

Figure 7. Percent of Students in Each Course by Level of Parental Education

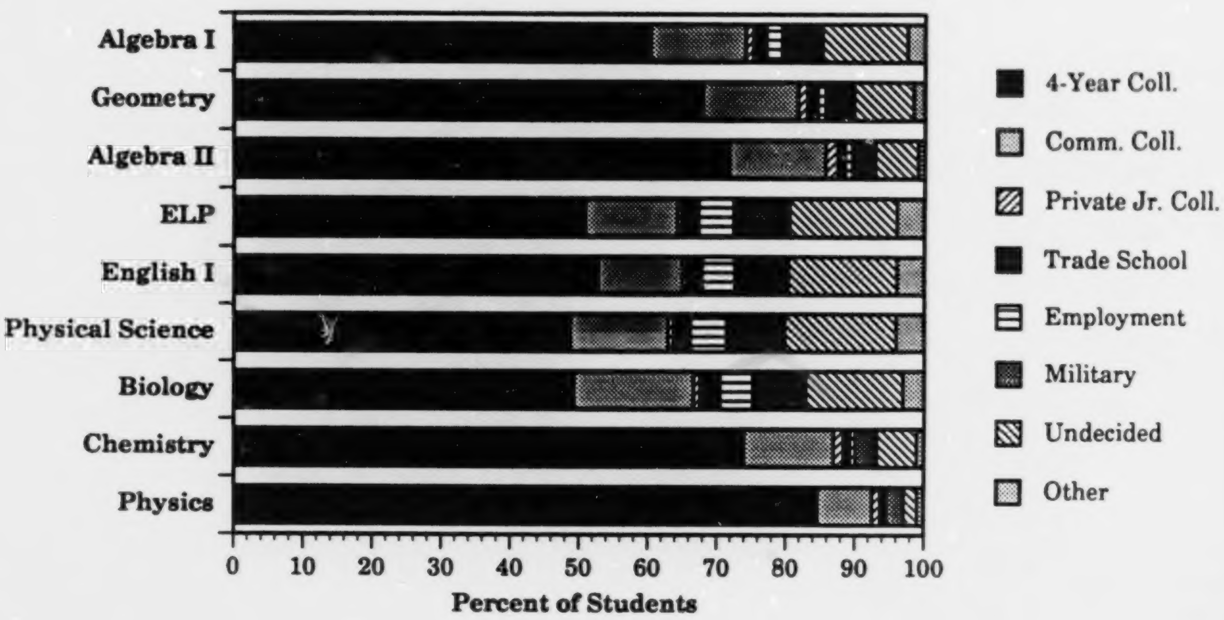


Observations:

- In the general courses, about 55 to 60 percent of students have one or more parents with education beyond high school.
- About 66 percent of Algebra I students have at least one parent with education beyond high school. In the most selective course, Physics, the figure is 82 percent.
- Students with parents with less than a high school education are less likely to take advanced courses.

Data Source: Table 6.

Figure 8. Percent of Students in Each Course by Post–High School Plans



Observations:

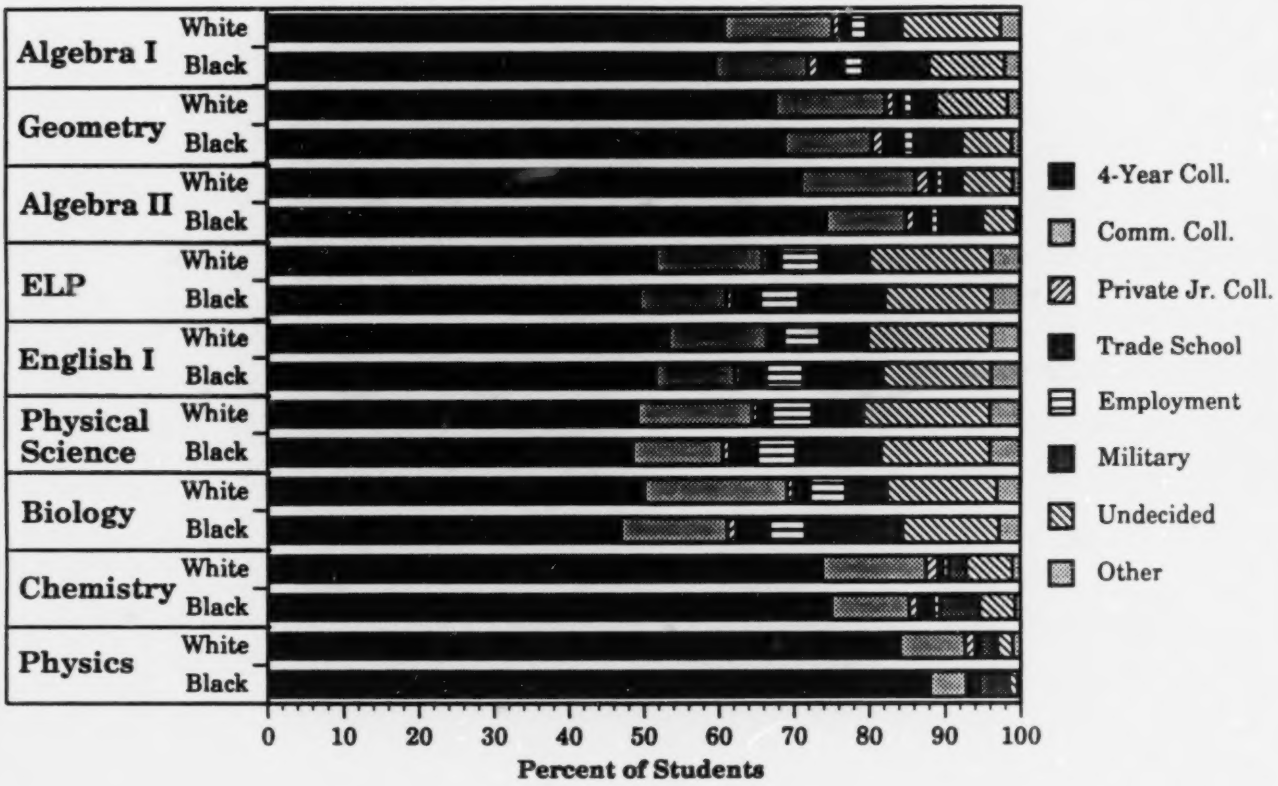
- More students in the selective courses plan to attend college than in the general courses.
- As selectiveness in courses increases, the percentage of students planning to attend a four-year college increases.
- The later in high school a course is taken, and the more selective a course is, students become more decided about their post-high school plans.

Note:

Post–high school plans were not collected for students in U.S. History.

Data Source: Table 6.

Figure 9. Percent of Students in Each Course by Ethnic Group and Post-High School Plans

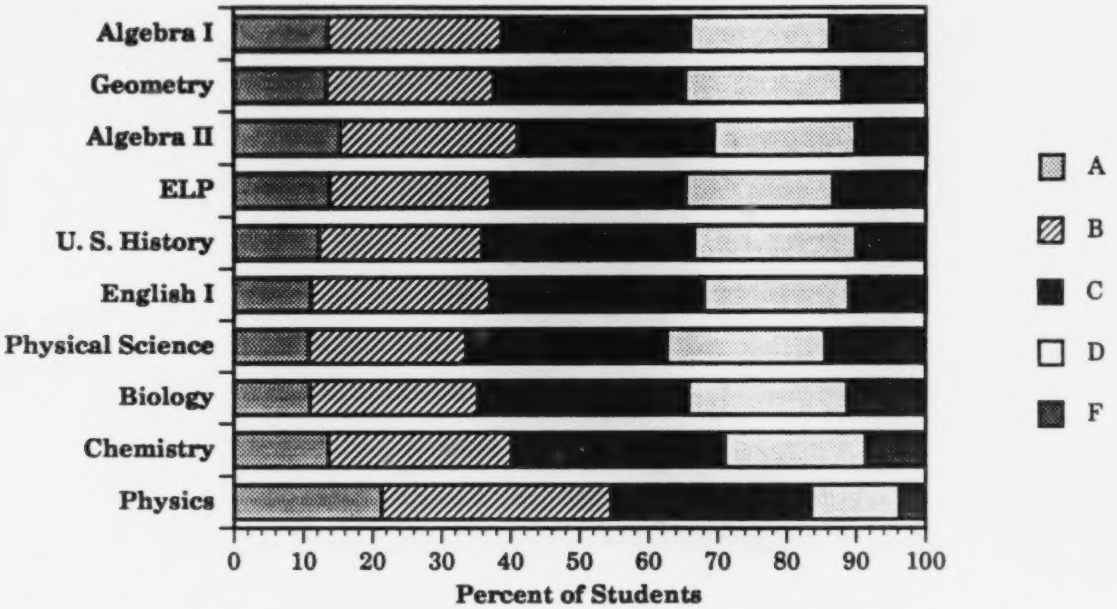


Observations:

- Within subjects, blacks and whites plan to attend a four-year college at about the same rate.
- As selectiveness increases, a slightly larger percentage of blacks plans to attend a four-year college.
- Higher percentages of white students than black students plan to attend a community college, while a larger percentage of black students plans to enlist in military service.
- In all courses, a smaller percentage of black students is undecided about their post-high school plans.

Data Source: not in text. Table 6 contains the overall proportions of students for each post–graduation plan.

Figure 10. Percent of Students in Each Course by Anticipated Final Grade

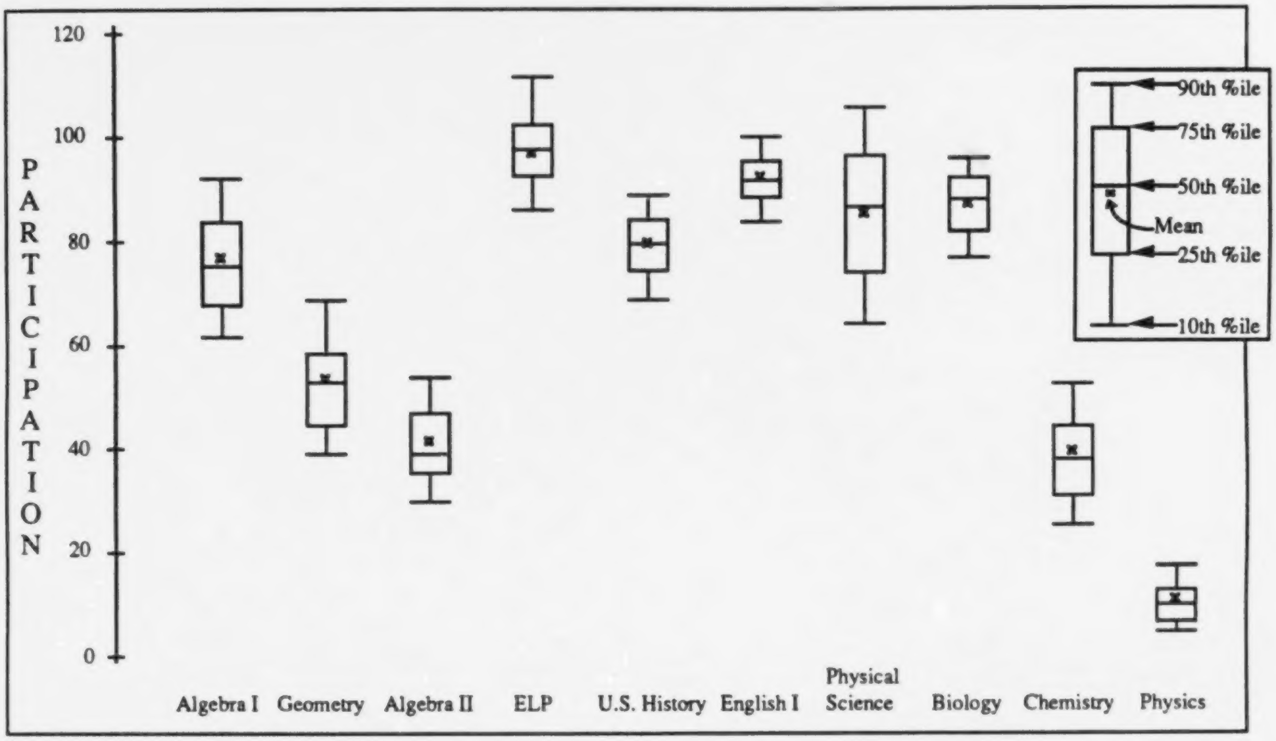


Observations:

- Except for Physics, similar percentages of students receive each letter grade in each subject.
- Generally, as the selectiveness in courses increases, grades increase slightly, but not to the extent one might expect, given the higher ability level.

Data Source: Table 6.

Figure 11. Plots of 1990-91 Participation Indices for 133 School Systems



Observations:

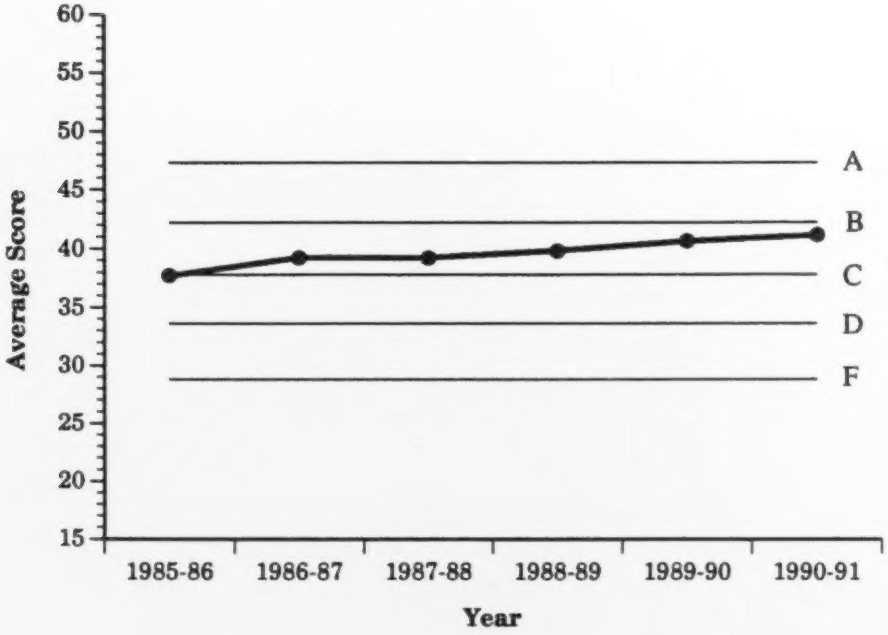
- Overall variation in participation is marked. Even in the census courses, variation is moderate.
- Participation of school systems among different subjects is highly variable because some courses required for graduation are taken by almost all students, while others are electives taken by few students.

Note:

Participation rates over 100 percent result from estimates of typical enrollment practices.

Data Source: Section V.

Figure 12. Statewide Average Algebra I Scores and Anticipated Final Grades: 1985-86 – 1990-91



Observations:

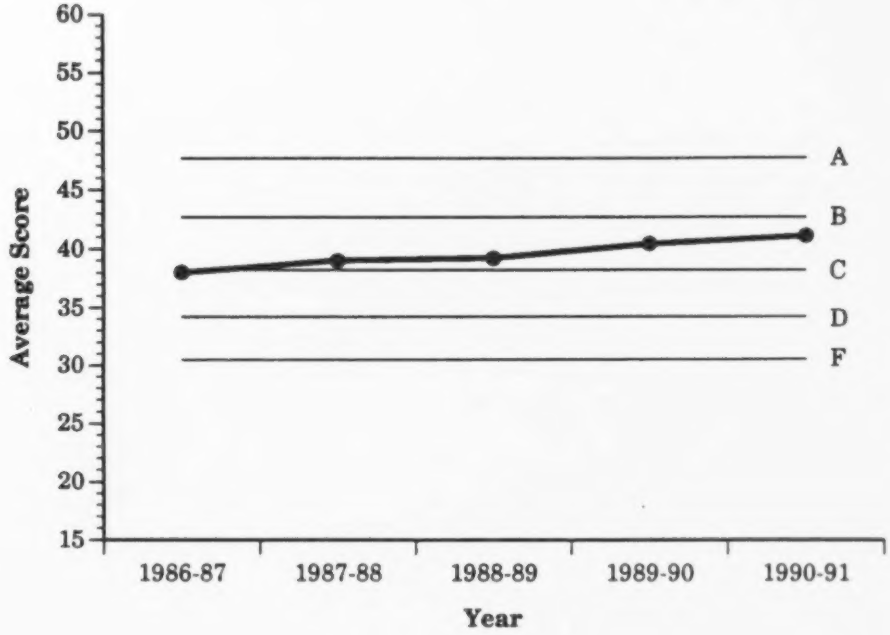
- According to 1985-86 grading standards, average Algebra I core scores have increased from a *C* to a *B*–.
- This increase in scores has occurred even with increased participation.

Note:

Teachers reported the final grade they anticipated giving each student at the time of test administration. The horizontal lines represent average 1985-86 Algebra I scores of students with each grade indicated by the letter to the right.

Data Source: Table 8.

Figure 13. Statewide Average Biology Scores: 1986-87 – 1990-91



Observations:

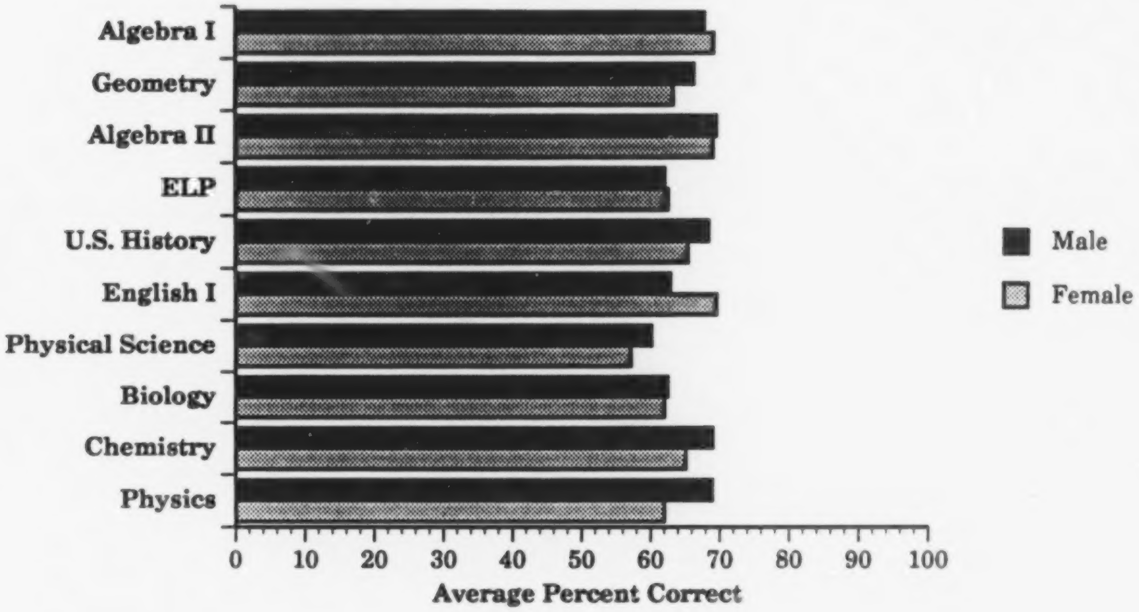
- According to 1986-87 grading standards, average Biology core scores have increased from a *C* to a *C+* or *B–*.

Note:

Teachers reported the final grade they anticipated giving each student at the time of test administration. The horizontal lines represent average 1986-87 Biology scores of the students with each grade indicated by the letter to the right.

Data Source: Table 8.

Figure 14. Average Percent Correct on Core Tests by Sex

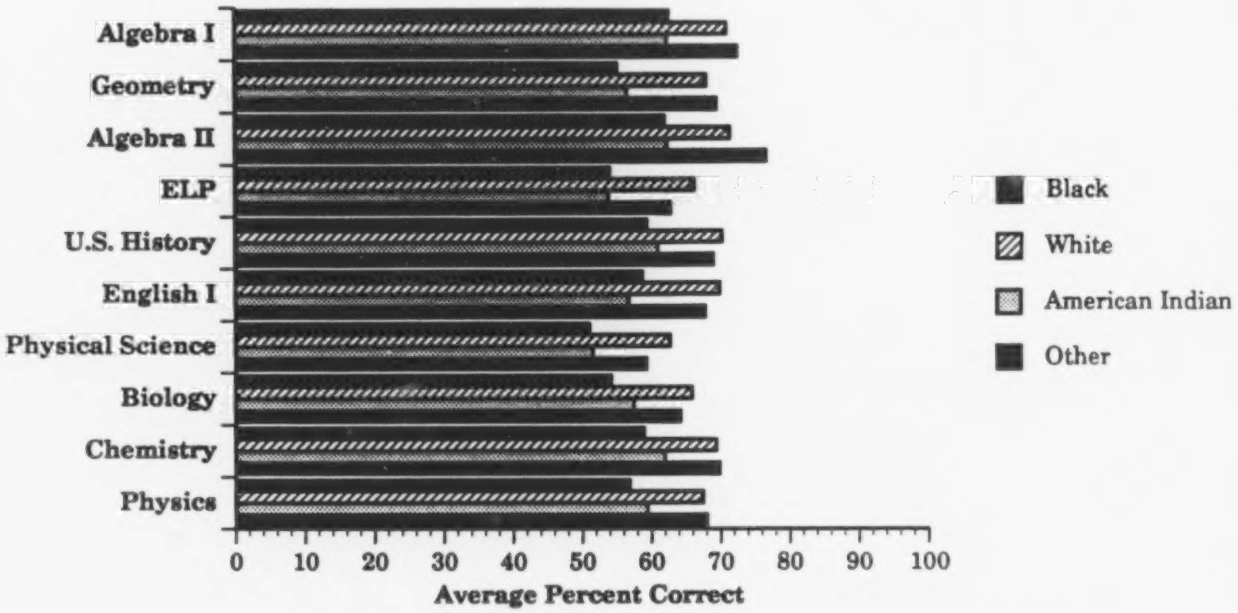


Observations:

- Females score higher than males on the English I test, while males score higher on the Physics test.
- Males score somewhat higher than females on the Geometry, Physical Science, Chemistry, and U.S. History tests.

Data Source: Table 6.

Figure 15. Average Percent Correct on Core Tests by Ethnic Group

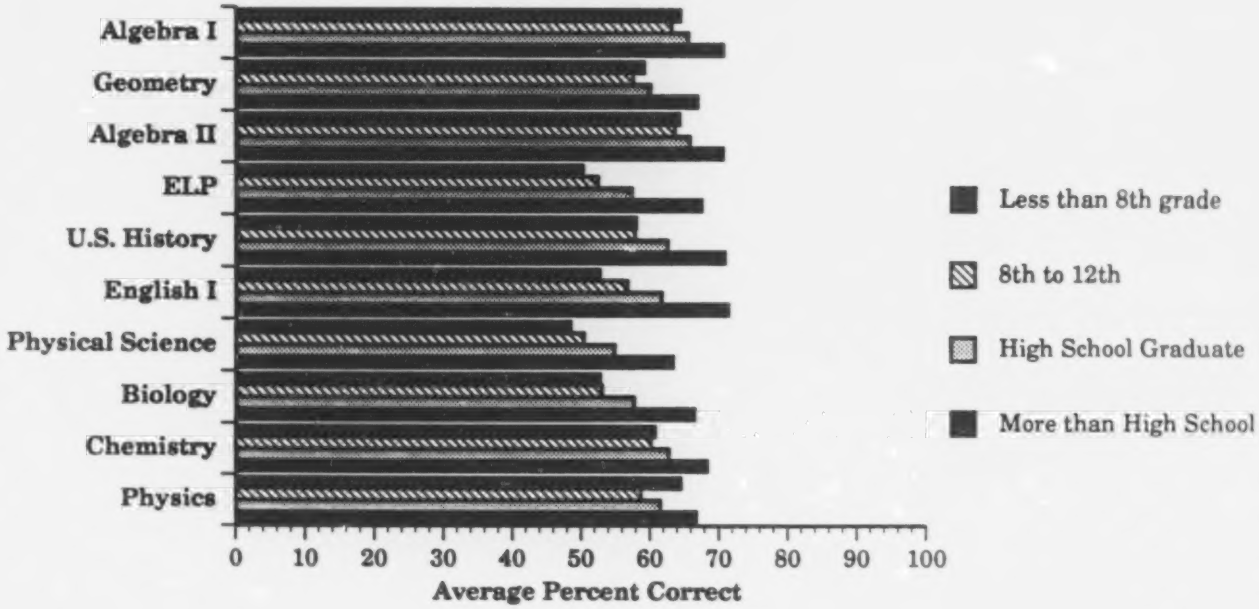


Observations:

- Whites and "other" students score significantly higher than blacks and American Indians on all ten End-of-Course tests.

Data Source: Table 6.

Figure 16. Average Percent Correct on Core Tests by Parental Education



Observations:

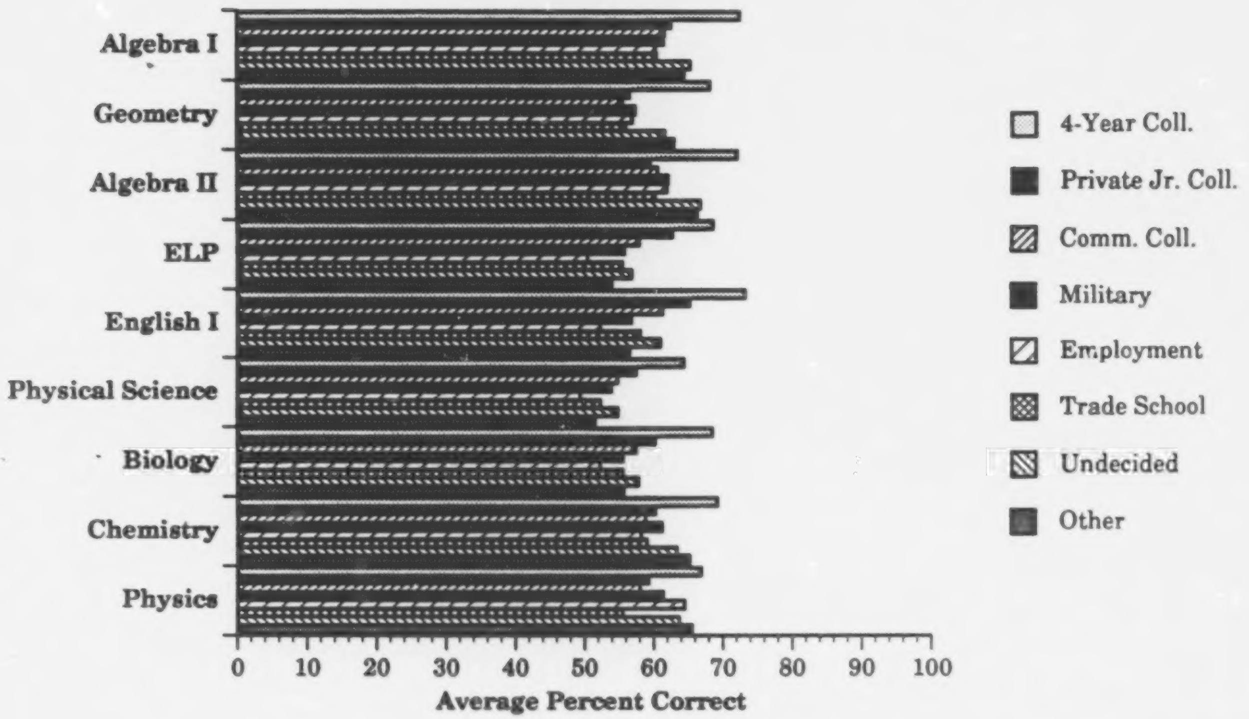
- Students with one parent with education beyond high school score higher on the End-of -Course tests than students whose parents did not pursue education beyond high school.
- This phenomenon is less prenounced on selective courses.

Note:

Students reported the highest education level attained by either parent.

Data Source: Table 6.

Figure 17. Average Percent Correct on Core Tests by Post-High School Plans

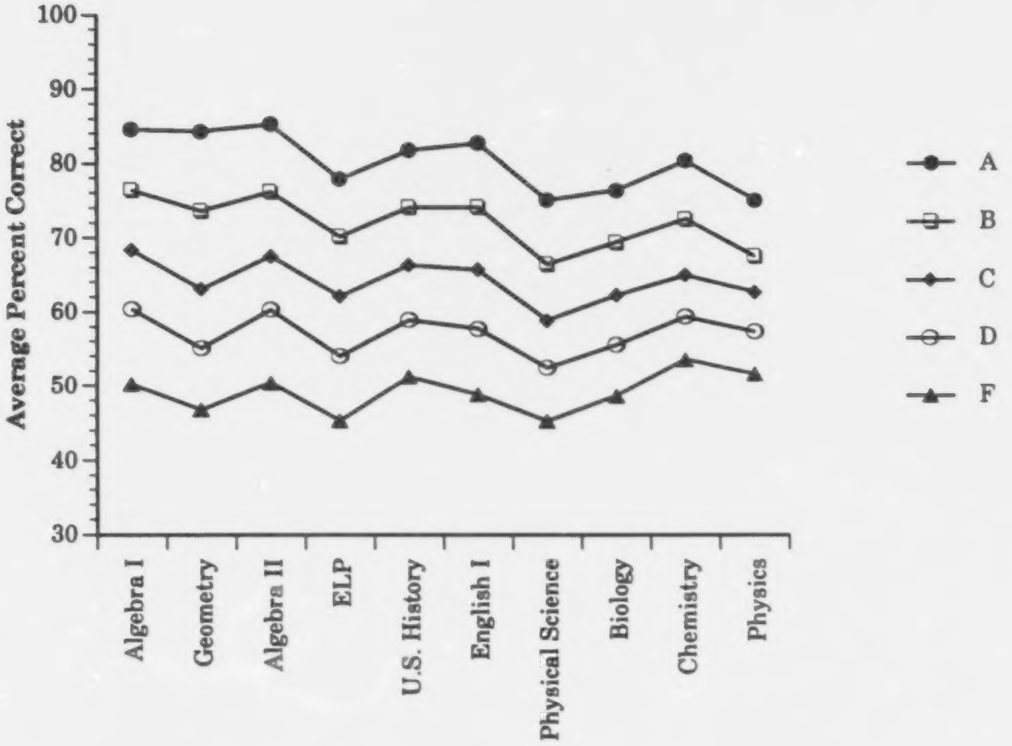


Observations:

- Students who plan to attend a four-year college score higher on all End-of-Course tests than those students with other post-high school plans.
- As the selectiveness of courses increases, the differences in average scores among students with different high school plans decrease.

Data Source: Table 6.

Figure 18. Average Percent Correct by Course and Anticipated Final Grade



Observations:

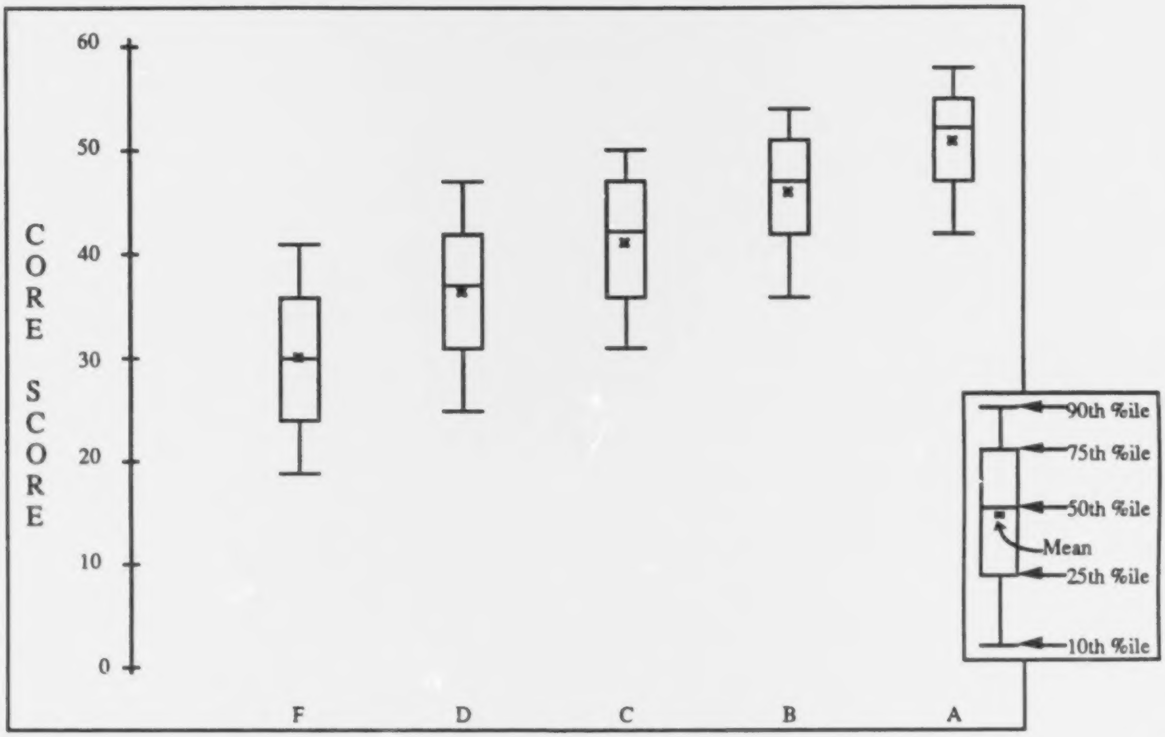
- There is a consistent difference in average scores for each anticipated final grade across all subjects, which is an indication of test validity, in that the results parallel the grading practices of teachers for students' work over the course of the school year.

Note:

Teachers reported the final grade they anticipated giving each student at the time of test administration.

Data Source: Table 6.

Figure 19. Distributions of 1990-91 Algebra I Core Scores by Anticipated Final Grade



Observations:

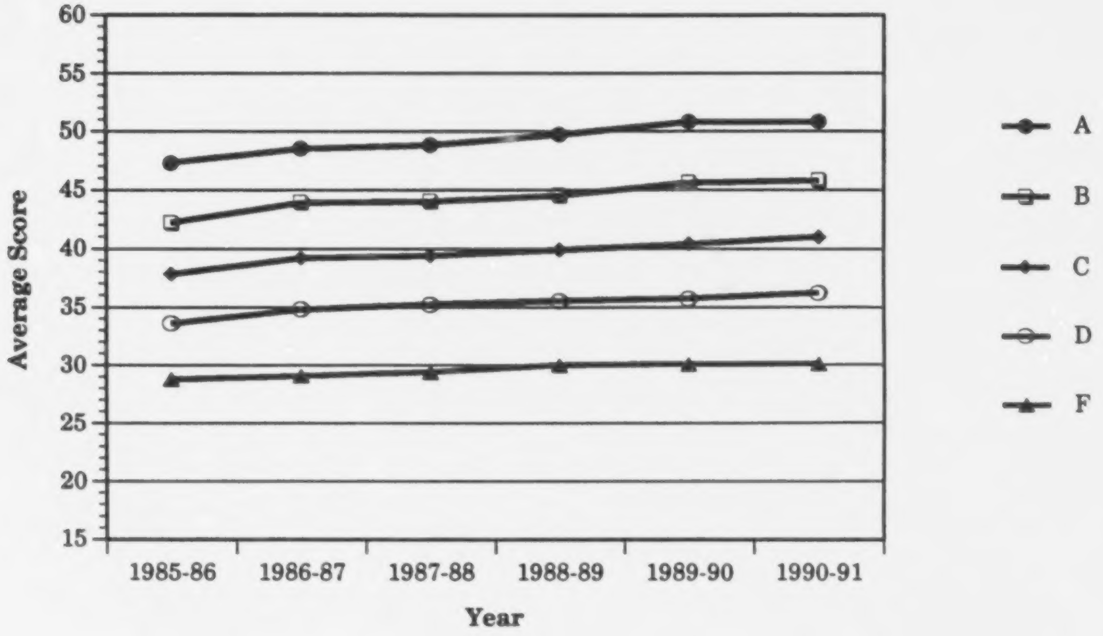
- Although the anticipated final grade is significantly related to mean Algebra I core score, much overlap exists in that ten percent of *A* students score at the average level of *C* students. Furthermore, approximately ten percent of *F* students scored higher than ten percent of *A* students.

Note:

Teachers reported the final grade they anticipated giving each student at the time of test administration.

Data Source: not in text.

Figure 20. Average Algebra I Scores by Anticipated Final Grade: 1985-86 – 1990-91



Observations:

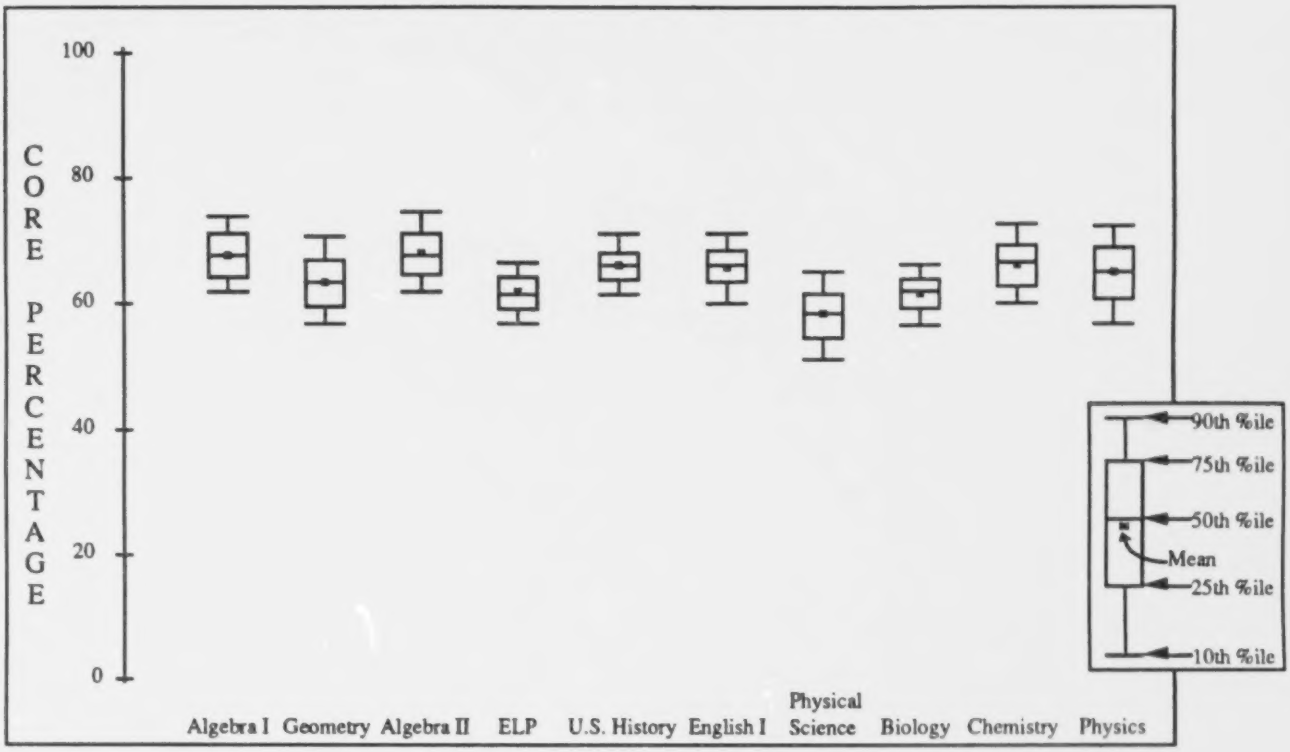
- As the average score for Algebra I has increased, so has the average score for each level of anticipated final grade.
- Because the average score for each anticipated final grade level has increased, grading standards have become more stringent over time.
- This increase in scores has occurred even with increased participation.

Note:

Teachers reported the final grade they anticipated giving each student at the time of test administration.

Data Source: Table 6.

Figure 21. Plots of 1990-91 Average Core Performance for 133 School Systems

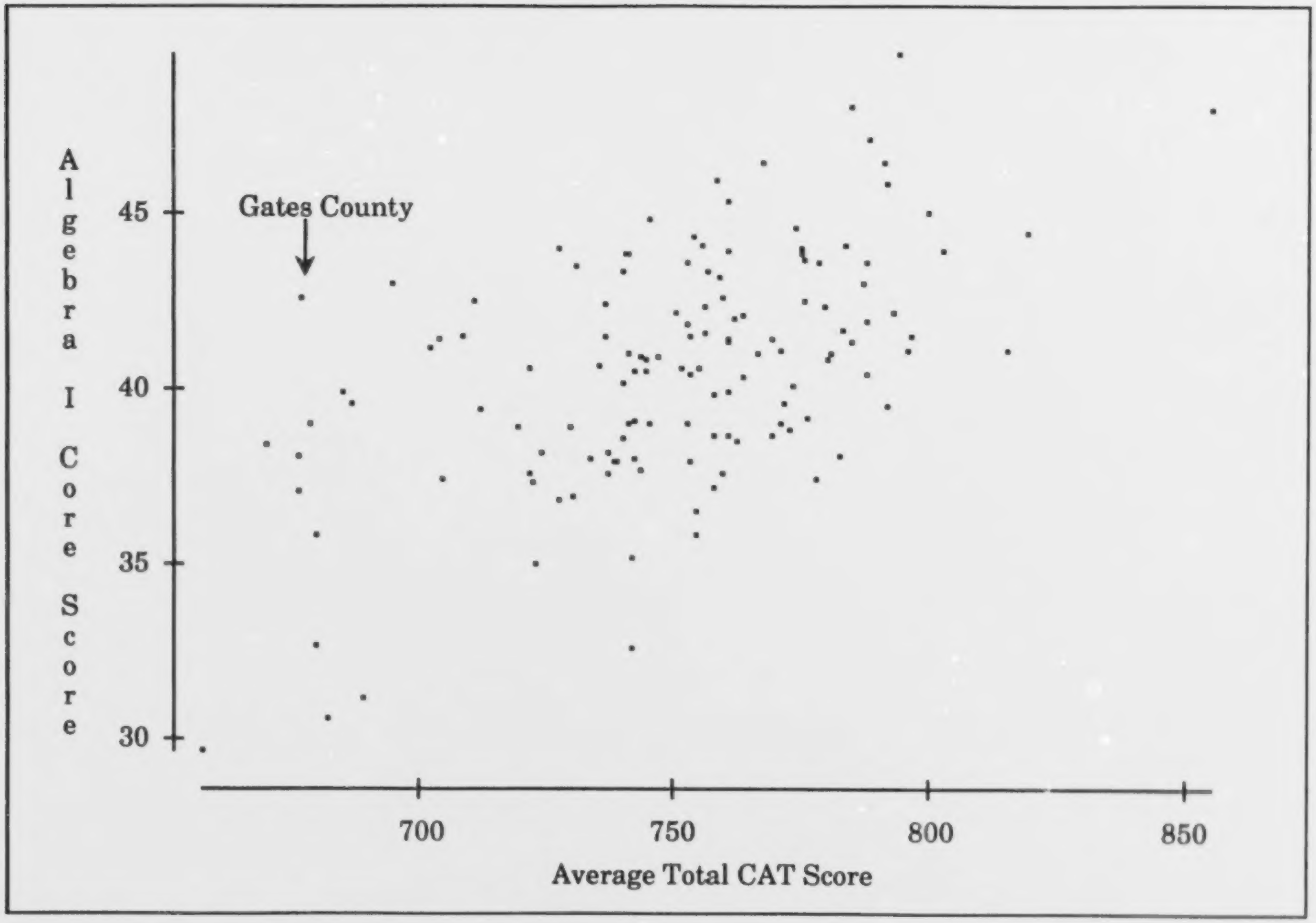


Observations:

- Many systems had very similar average scores, as evidenced in the small variation in core percentage. For U.S. History the middle 50 percent of school systems scored within about three core points.

Data Source: Section V.

Figure 22. 1990-91 Average Algebra I Core Scores by 1989-90 Average Eighth-Grade CAT Scores by School System



Observations:

- There is a trend that school systems with high CAT scores have high Algebra I scores.
- Even though there is a relationship, school systems can buck the trend as does Gates County, which scores higher than two-thirds of school systems in the state on the Algebra I test, yet is near the bottom on the CAT.

Figure 23. Average Algebra I Core Scores and Participation for School Systems Listed by 1989-90 Eighth-Grade CAT Score Interval.

Observations:

- The range in participation among school systems with similar average ability, as measured by the eighth-grade CAT, is almost as great as the range among all school systems.
- All the variation in participation cannot be explained by variations in the ability levels of student populations.

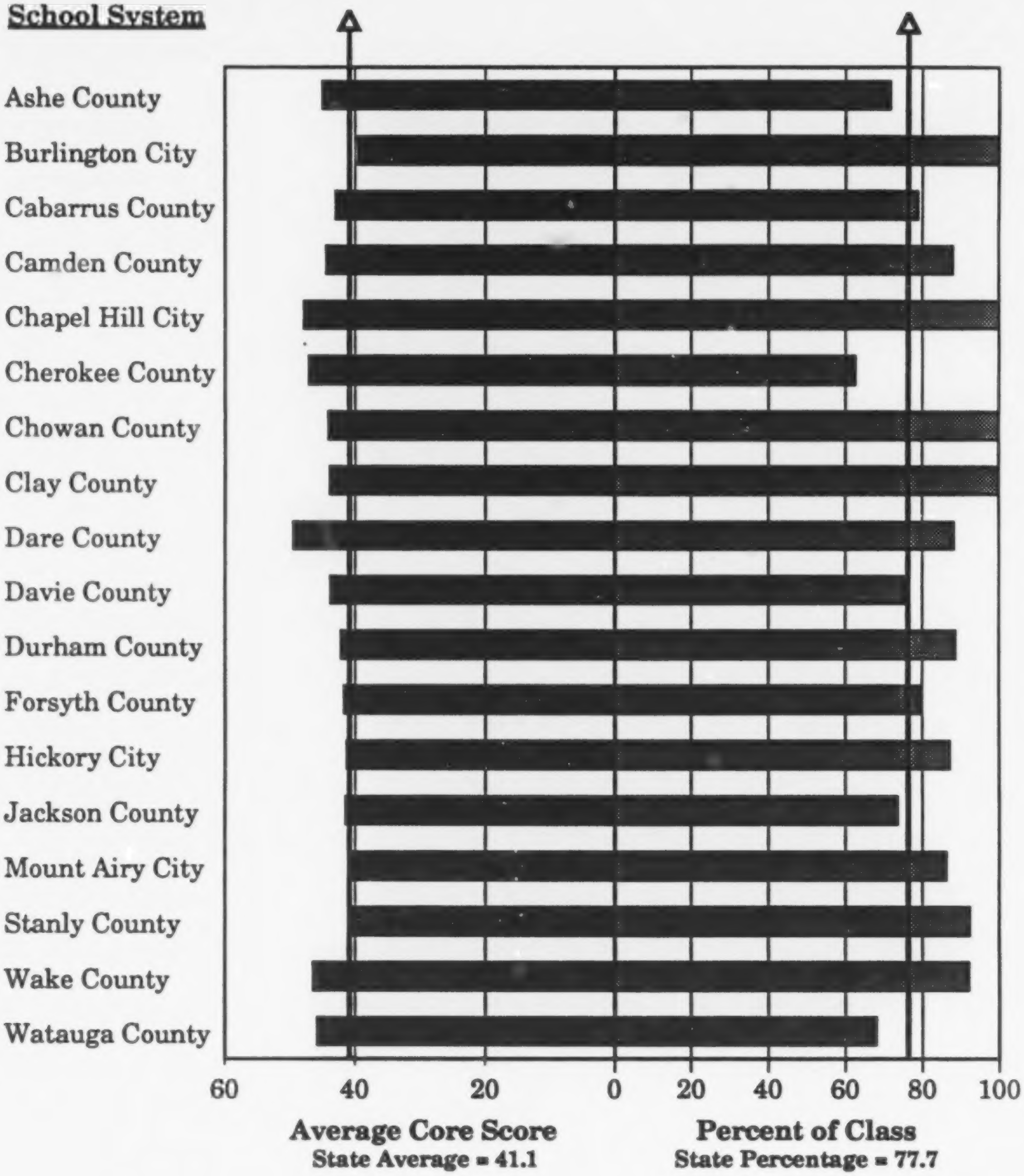
Notes:

School systems are arranged in alphabetical order within groups.

Data Source: not in text

Figure 23. Average Algebra I Core Scores and Participation for School Systems Listed by 1989-90 Eighth-Grade CAT Score Interval

65th Percentile and Above

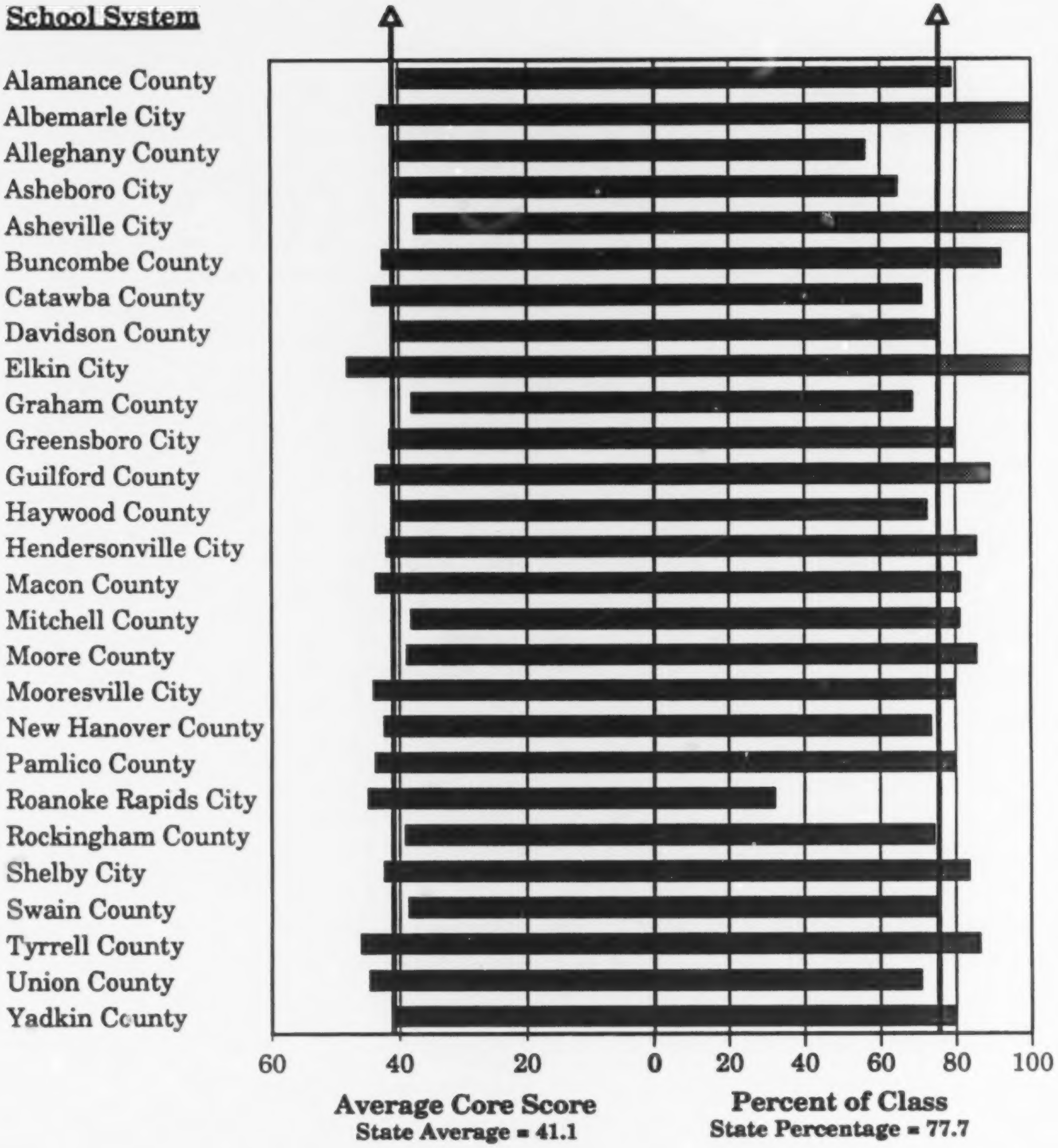


School Systems are arranged in alphabetical order.

State Averages indicated by arrows.

Figure 23 cont'd.

60th to 65th Percentile

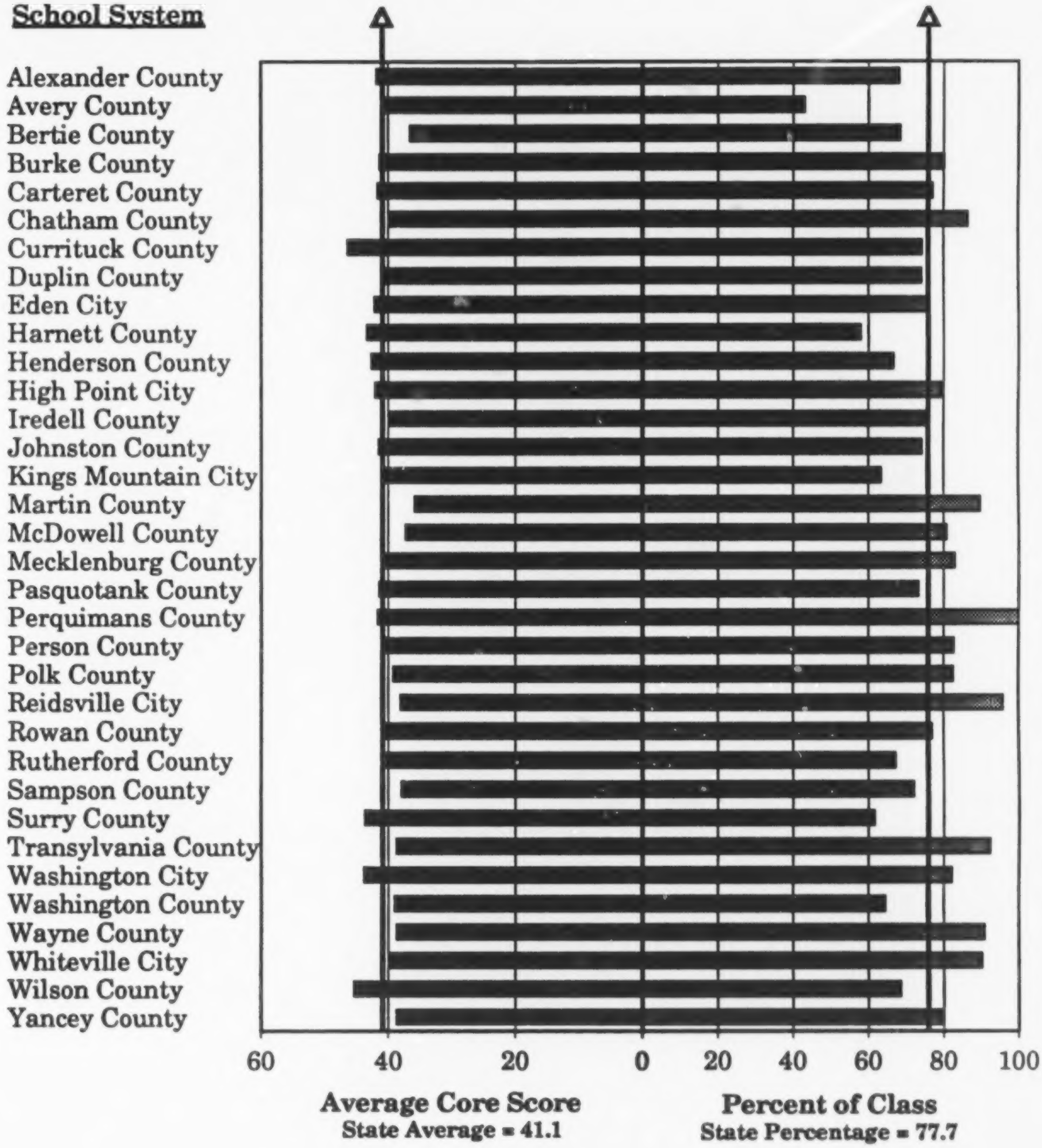


School Systems are arranged in alphabetical order.

State Averages indicated by arrows.

Figure 23 cont'd.

55th to 59th Percentile

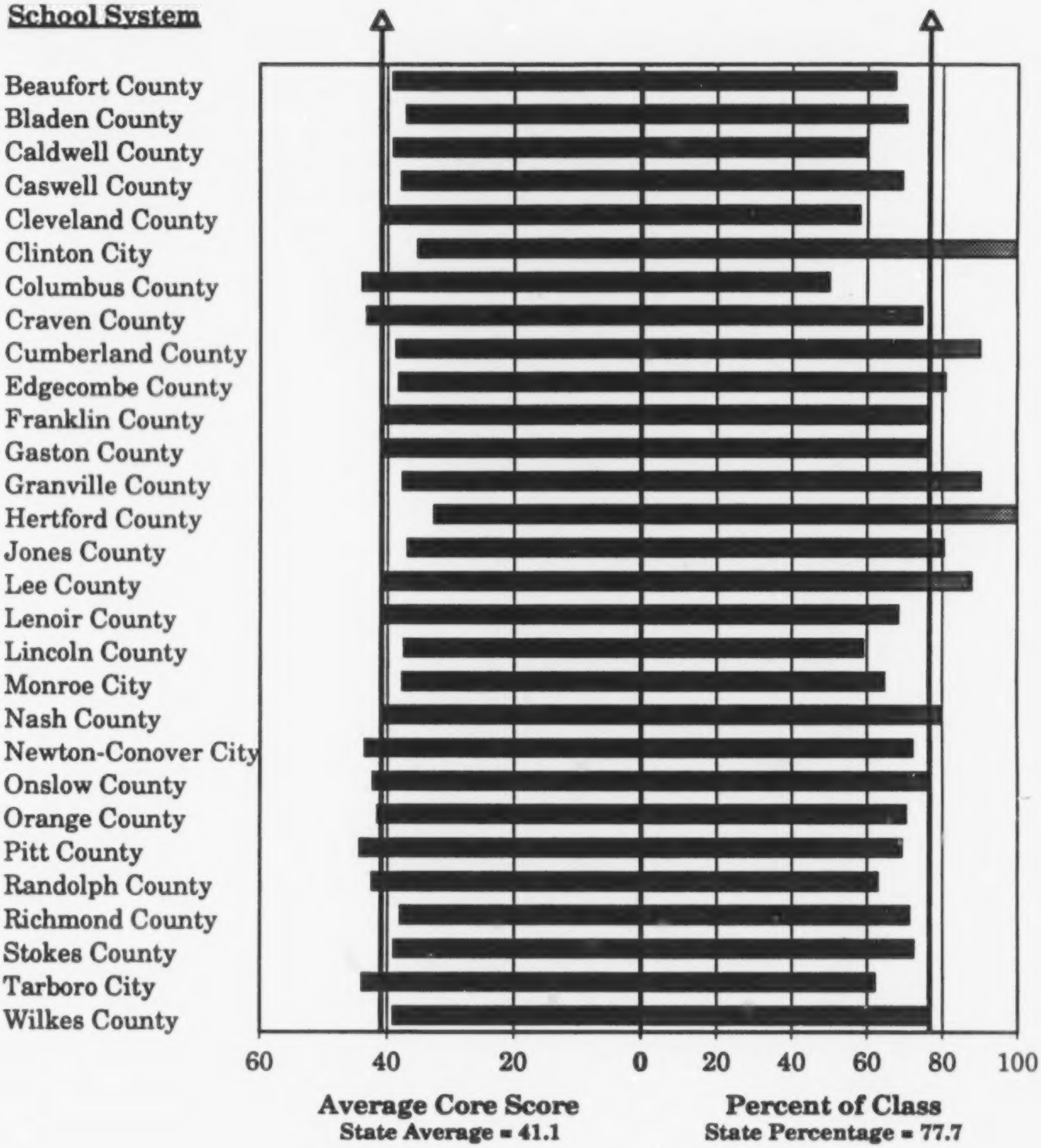


School Systems are arranged in alphabetical order.

State Averages indicated by arrows.

Figure 23 cont'd.

50th to 54th Percentile

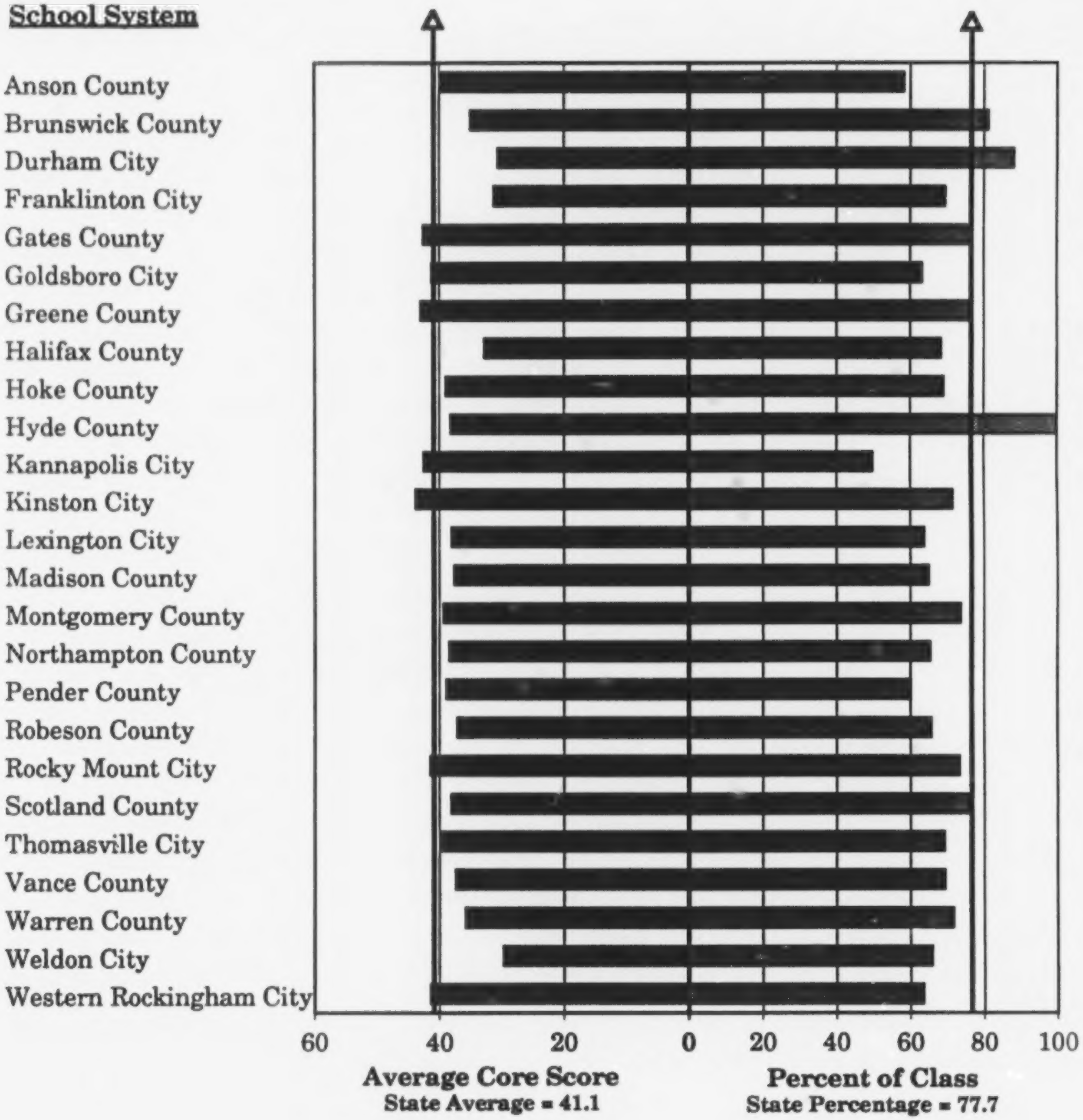


School Systems are arranged in alphabetical order.

State Averages indicated by arrows.

Figure 23 cont'd.

Below the 50th Percentile



School Systems are arranged in alphabetical order.

State Averages indicated by arrows.

Section IV : Outstanding Systems

Outstanding School Systems: 1990-91 Score on End-of-Course Tests

Algebra I

Rank	System	Percent Correct
1.	Dare County	82.5
2.	Elkin City	80.0
3.	Chapel Hill City	79.8
4.	Cherokee County	78.6
5.	Wake County	77.4
6.	Currituck County	77.3
7.	Tyrrell County	76.6
8.	Watauga County	76.3
9.	Wilson County	75.5
10.	Ashe County	75.0

Geometry

Rank	System	Percent Correct
1.	Dare County	85.0
2.	Chapel Hill City	77.8
2.	Tyrrell County	77.8
4.	Mooresville City	77.6
5.	Albemarle City	76.7
6.	Ashe County	74.9
7.	Wake County	73.8
8.	Yancey County	73.4
9.	Catawba County	72.2
10.	Hendersonville City	72.0

Algebra II

Rank	System	Percent Correct
1.	Chapel Hill City	82.2
2.	Watauga County	80.4
3.	Dare County	79.8
4.	Madison County	77.8
4.	Tyrrell County	77.8
6.	Wake County	77.2
7.	Chowan County	77.0
8.	Chatham County	76.4
9.	Elkin City	76.2
10.	Gates County	76.0

ELP

Rank	System	Percent Correct
1.	Hendersonville City	77.5
2.	Dare County	73.4
3.	Swain County	72.8
4.	Currituck County	70.6
5.	Chapel Hill City	70.5
6.	Roanoke Rapids City	69.6
6.	Wake County	69.6
8.	Hickory City	69.2
9.	Mooresville City	68.6
10.	Watauga County	68.5

U.S. History

Rank	System	Percent Correct
1.	Orange County	74.9
2.	Wake County	74.3
3.	Davie County	74.0
4.	Hickory City	73.8
5.	Roanoke Rapids City	73.7
6.	Dare County	73.2
6.	Watauga County	73.2
6.	Whiteville City	73.2
9.	Elkin City	72.8
10.	Durham County	71.5

English I

Rank	System	Percent Correct
1.	Whiteville City	76.2
2.	Chapel Hill City	76.0
3.	Roanoke Rapids City	74.4
4.	Mooresville City	73.6
5.	Dare County	72.3
6.	Wake County	72.2
7.	Currituck County	72.1
8.	New Hanover County	72.0
9.	Cabarrus County	71.9
10.	Cherokee County	71.7

Physical Science

Rank	System	Percent Correct
1.	Dare County	72.2
2.	Currituck County	69.7
3.	Watauga County	68.4
4.	Cabarrus County	67.6
4.	Chapel Hill City	67.6
6.	Franklin County	66.6
6.	Yancey County	66.6
8.	Rutherford County	66.1
9.	Ashe County	65.9
9.	Jackson County	65.9

Biology

Rank	System	Percent Correct
1.	Dare County	72.5
2.	Roanoke Rapids City	71.8
3.	Graham County	71.1
4.	Chapel Hill City	70.9
5.	Elkin City	70.8
6.	Hickory City	69.3
7.	Wake County	69.1
8.	Currituck County	68.8
9.	Hendersonville City	68.4
10.	Cherokee County	67.7

Chemistry

Rank	System	Percent Correct
1.	Mooresville City	80.3
2.	Watauga County	79.9
3.	Roanoke Rapids City	76.9
4.	Hendersonville City	75.5
5.	Dare County	75.3
6.	Davie County	75.2
7.	Chapel Hill City	75.0
8.	Cabarrus County	73.4
8.	Durham County	73.4
10.	Union County	73.3

Physics

Rank	System	Percent Correct
1.	Davie County	81.9
2.	Watauga County	79.7
3.	Thomasville City	78.3
4.	McDowell County	77.5
5.	Chapel Hill City	76.8
6.	Carteret County	76.7
7.	Lenoir County	75.6
8.	Graham County	75.3
9.	Mooresville City	75.2
10.	Mitchell County	75.0

Outstanding School Systems: 1990-91 Participation in Selective Courses[1]

Algebra I

Rank	System	Participation
1.	Elkin City	123.3
2.	Clinton City	119.6
3.	Perquimans County	112.8
4.	Clay County	111.1
5.	Chapel Hill City	109.7
6.	Albemarle City	107.2
7.	Burlington City	105.1
8.	Asheville City	104.5
8.	Hyde County	104.5
10.	Chowan County	103.9

Geometry

Rank	System	Participation
1.	Hendersonville City	106.1
2.	Mount Airy City	105.2
3.	Camden County	91.4
4.	Albemarle City	86.8
5.	Chapel Hill City	79.4
6.	Washington County	73.4
7.	Lexington City	72.8
8.	Graham County	72.4
9.	Burlington City	72.3
10.	Elkin City	71.4

Algebra II

Rank	System	Participation
1.	Hendersonville City	100.9
2.	Chapel Hill City	79.1
3.	Albemarle City	77.9
4.	Elkin City	64.0
5.	Wake County	61.2
6.	Mooresville City	61.1
7.	Guilford County	60.2
8.	Swain County	58.3
9.	Asheboro City	57.7
10.	Greensboro City	57.4

Chemistry

Rank	System	Participation
1.	Chapel Hill City	86.9
2.	Mount Airy City	84.3
3.	Hendersonville City	76.5
4.	Albemarle City	68.6
5.	Elkin City	62.7
6.	New Hanover County	61.5
7.	Wake County	61.4
8.	Shelby City	57.9
9.	Carteret County	56.9
10.	Eden City	55.1

Physics

Rank	System	Participation
1.	Chapel Hill City	40.0
2.	Whiteville City	35.7
3.	Wake County	28.0
4.	Eden City	27.8
5.	Mount Airy City	26.2
6.	Hendersonville City	25.6
7.	Burlington City	25.2
8.	Gates County	24.4
9.	Newton City	22.1
10.	Tyrrell County	21.5

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[1] For interpreting participation rates, see the note on page 12.

Outstanding School Systems: 1990-91 Yield in Selective Courses

Algebra I

Rank	System	Yield
1.	Elkin City	98.7
2.	Chapel Hill City	87.6
3.	Clay County	81.2
4.	Perquimans County	78.3
5.	Albemarle City	77.2
6.	Chowan County	76.4
7.	Dare County	72.8
8.	Wake County	71.3
9.	Clinton City	70.2
10.	Burlington City	69.2

Geometry

Rank	System	Yield
1.	Hendersonville City	76.4
2.	Mount Airy City	71.2
3.	Albemarle City	66.5
4.	Chapel Hill City	61.7
5.	Camden County	59.6
6.	Dare County	53.7
7.	Wake County	50.7
8.	Burlington City	49.2
9.	Asheboro City	48.4
10.	Durham County	47.6

Algebra II

Rank	System	Yield
1.	Hendersonville City	68.8
2.	Chapel Hill City	65.0
3.	Albemarle City	57.4
4.	Elkin City	48.8
5.	Wake County	47.3
6.	Guilford County	43.0
6.	Mooresville City	43.0
8.	New Hanover County	39.8
9.	Durham County	39.7
10.	Burlington City	39.4

Chemistry

Rank	System	Yield
1.	Chapel Hill City	65.2
2.	Hendersonville City	57.8
3.	Mount Airy City	57.3
4.	Albemarle City	45.9
5.	Wake County	44.8
6.	New Hanover County	43.5
7.	Elkin City	41.0
8.	Roanoke Rapids City	40.1
9.	Carteret County	39.3
10.	Durham County	38.9

Physics

Rank	System	Yield
1.	Chapel Hill City	30.8
2.	Whiteville City	22.6
3.	Wake County	20.0
4.	Hendersonville City	18.5
5.	Mount Airy City	18.2
6.	Burlington City	17.0
7.	Eden City	16.4
8.	Newton City	15.0
9.	Gates County	14.3
10.	Albemarle City	12.1
10.	Tyrrell County	12.1

Outstanding School Systems: 1990-91 Effective Yield in Selective Courses

Algebra I

Rank	System	Effective Yield
1.	Elkin City	96.0
2.	Chapel Hill City	85.9
3.	Clay County	76.7
4.	Chowan County	74.9
5.	Dare County	72.0
6.	Perquimans County	71.6
7.	Albemarle City	68.9
8.	Wake County	68.4
9.	Tyrrell County	64.7
10.	Camden County	62.8

Geometry

Rank	System	Effective Yield
1.	Hendersonville City	74.2
2.	Mount Airy City	66.8
3.	Albemarle City	65.0
4.	Chapel Hill City	60.3
5.	Dare County	53.4
6.	Camden County	52.3
7.	Wake County	48.8
8.	Asheboro City	45.3
9.	Durham County	45.0
10.	Burlington City	44.0
10.	Newton City	44.0

Algebra II

Rank	System	Effective Yield
1.	Chapel Hill City	64.3
2.	Hendersonville City	63.5
3.	Albemarle City	53.7
4.	Elkin City	48.8
5.	Wake County	46.7
6.	Guilford County	41.1
7.	Mooresville City	40.5
8.	New Hanover County	38.6
9.	Cabarrus County	38.5
10.	Durham County	38.2

Chemistry

Rank	System	Effective Yield
1.	Chapel Hill City	62.7
2.	Hendersonville City	57.1
3.	Mount Airy City	54.7
4.	Albemarle City	45.5
5.	Wake County	44.0
6.	New Hanover County	42.8
7.	Elkin City	41.0
8.	Roanoke Rapids City	39.7
9.	Carteret County	38.6
9.	Durham County	38.6

Physics

Rank	System	Effective Yield
1.	Chapel Hill City	30.6
2.	Whiteville City	22.3
3.	Wake County	19.6
4.	Hendersonville City	18.5
5.	Mount Airy City	18.2
6.	Burlington City	16.9
7.	Eden City	15.2
8.	Newton City	15.0
9.	Gates County	13.8
10.	Albemarle City	12.1
10.	Tyrrell County	12.1

Outstanding School Systems: Gain in Core Score: 1990 to 1991

Algebra I

Rank	System	'91–'90 Gain
1.	Kannapolis City	8.9
2.	New Hanover County	5.0
3.	Yadkin County	4.7
4.	Columbus County	4.6
5.	Roanoke Rapids City	4.3
6.	Alexander County	4.2
7.	Goldsboro City	3.7
8.	Mooresville City	3.5
9.	Beaufort County	3.3
10.	Clay County	3.1
10.	Elkin City	3.1
10.	Whiteville City	3.1

Algebra II

Rank	System	'91–'90 Gain
1.	Orange County	10.5
2.	Warren County	8.6
3.	Anson County	8.0
4.	Mooresville City	7.7
5.	Bertie County	7.5
6.	Edgecombe County	7.3
7.	Polk County	7.0
8.	Avery County	6.1
8.	Tyrrell County	6.1
10.	Onslow County	6.0

English I

Rank	System	'91–'90 Gain
1.	Weldon City	14.3
2.	Chowan County	9.1
3.	Yancey County	8.9
4.	Hyde County	7.0
5.	Columbus County	6.8
6.	Beaufort County	6.2
7.	Dare County	5.5
7.	Yadkin County	5.5
9.	Davie City	5.2
10.	Granville County	4.6

Geometry

Rank	System	'91–'90 Gain
1.	Anson County	4.5
2.	Bertie County	4.1
3.	Avery County	3.9
3.	Onslow County	3.9
5.	Albemarle City	3.7
5.	Washington County	3.7
7.	Alexander County	3.6
8.	Polk County	3.2
9.	Newton City	3.1
10.	Richmond County	3.0

U.S. History

Rank	System	'91–'90 Gain
1.	Kings Mountain City	3.3
2.	Hyde County	2.9
3.	Weldon City	2.3
4.	Orange County	2.0
5.	Pamlico County	0.9
6.	Washington City	0.4
7.	Cleveland County	0.3
8.	Mount Airy City	0.2
8.	Roanoke Rapids City	0.2
10.	Whiteville City	0.1

Biology

Rank	System	'91–'90 Gain
1.	Graham County	11.1
2.	Avery County	5.3
3.	Franklinton City	3.6
4.	Currituck County	3.4
4.	Hertford County	3.4
6.	Lexington City	3.3
7.	Washington County	2.9
8.	Alexander County	2.8
9.	Cherokee County	2.6
10.	Tyrrell County	2.5

Chemistry

Rank	System	'91–'90 Gain
1.	Graham County	7.7
2.	Jones County	7.5
3.	Polk County	7.4
4.	Alexander County	6.4
5.	Washington City	6.3
6.	Lee County	5.7
7.	Bertie County	5.6
7.	Hendersonville City	5.6
9.	Cabarrus County	5.3
10.	Anson County	5.1
10.	West. Rockingham	5.1

Physics

Rank	System	'91–'90 Gain
1.	McDowell County	10.9
2.	Orange County	10.1
3.	Graham County	10.0
4.	Thomasville City	7.9
5.	Bertie County	7.4
6.	Weldon City	7.1
7.	Yadkin County	6.7
8.	Reidsville City	6.2
9.	Macon County	5.8
10.	Davie County	5.7

Outstanding School Systems: Gain in Participation: 1990 to 1991[1]

Algebra I

Rank	System	'91–'90 Gain
1.	Clay County	61.1
2.	Hyde County	61.0
3.	Clinton City	52.4
4.	Hertford County	44.3
5.	Elkin City	39.0
6.	Tyrrell County	36.2
7.	Reidsville City	31.4
8.	Greene County	28.9
9.	Perquimans County	27.5
10.	Chapel Hill City	26.2

Geometry

Rank	System	'91–'90 Gain
1.	Hendersonville City	60.8
2.	Camden County	42.0
3.	Mount Airy City	38.0
4.	Weldon City	36.3
5.	Tarboro City	23.1
6.	Lexington City	22.0
7.	Franklinton City	20.9
8.	Madison County	20.5
9.	Currituck County	19.9
10.	Dare County	17.0

Algebra II

Rank	System	'91–'90 Gain
1.	Albemarle City	27.1
2.	Jones County	23.1
3.	Chapel Hill City	21.1
4.	Kings Mountain City	19.2
5.	Clay County	18.7
6.	Perquimans County	17.9
7.	Hyde County	15.4
8.	Lexington City	14.7
9.	Davie County	14.5
10.	Yancey County	14.1

Chemistry

Rank	System	'91–'90 Gain
1.	Mount Airy City	48.5
2.	Chapel Hill City	30.5
3.	Perquimans County	17.5
4.	Mooresville City	16.2
5.	Carteret County	15.9
6.	Greene County	15.0
7.	Yancey County	14.3
8.	Franklin County	13.6
9.	Hendersonville City	12.9
10.	Asheville City	12.1

Physics

Rank	System	'91–'90 Gain
1.	Newton City	13.3
2.	Elkin City	12.4
3.	Perquimans County	8.6
4.	Rockingham County	7.2
5.	Mount Airy City	6.7
6.	Northampton County	6.4
6.	Whiteville City	6.4
8.	Sampson County	6.1
9.	Gates County	5.4
9.	Goldsboro City	5.4
9.	Hendersonville City	5.4

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[1] For interpreting participation rates, see the note on page 12.

Outstanding School Systems: Gain in Yield: 1990 to 1991

Algebra I

Rank	System	'91–'90 Gain
1.	Clay County	47.2
2.	Hyde County	37.2
3.	Elkin City	35.6
4.	Clinton City	30.5
5.	Tyrrell County	26.4
6.	Greene County	22.7
7.	Chowan County	19.7
8.	Reidsville City	19.5
9.	Perquimans County	18.5
10.	Hertford County	18.2

Geometry

Rank	System	'91–'90 Gain
1.	Hendersonville City	44.7
2.	Camden County	25.9
3.	Mount Airy City	25.8
4.	Weldon City	18.4
5.	Dare County	14.6
6.	Albemarle City	14.2
7.	Lexington City	13.7
7.	Madison County	13.7
9.	Newton City	13.5
10.	Washington County	13.4

Algebra II

Rank	System	'91–'90 Gain
1.	Albemarle City	19.4
2.	Jones County	16.9
3.	Clay County	16.3
4.	Chapel Hill City	14.6
5.	Mooresville City	14.2
6.	Yancey County	13.4
7.	Kings Mountain City	13.0
8.	Davie County	11.7
9.	Lexington City	10.6
10.	Perquimans County	9.3

Chemistry

Rank	System	'91–'90 Gain
1.	Mount Airy City	33.0
2.	Chapel Hill City	25.5
3.	Hendersonville City	15.6
4.	Mooresville City	14.5
5.	Carteret County	12.1
6.	Perquimans County	11.5
7.	Greene County	9.9
8.	Franklin County	9.1
9.	Asheville City	8.8
10.	Cabarrus County	8.6
10.	Pitt County	8.6

Physics

Rank	System	'91–'90 Gain
1.	Newton City	8.9
2.	Elkin City	8.2
3.	Perquimans County	6.4
4.	Mount Airy City	5.7
5.	Whiteville City	5.4
6.	Hendersonville City	4.7
7.	Rockingham County	4.2
8.	Gates County	3.7
9.	Sampson County	3.6
10.	Harnett County	3.5

Outstanding School Systems: Gain in Effective Yield: 1990 to 1991

Algebra I

Rank	System	'91–'90 Gain
1.	Clay County	43.4
2.	Elkin City	32.9
3.	Hyde County	32.8
4.	Tyrrell County	25.1
5.	Greene County	23.7
6.	Clinton City	22.8
7.	Chapel Hill City	20.5
8.	Washington City	19.9
9.	Chowan County	19.7
10.	Mooresville City	19.6

Geometry

Rank	System	'91–'90 Gain
1.	Hendersonville City	43.2
2.	Mount Airy City	24.9
3.	Camden County	19.6
4.	Washington County	15.2
5.	Albemarle City	14.2
5.	Dare County	14.2
7.	Madison County	13.4
8.	Newton City	12.1
9.	Currituck County	10.8
10.	Lexington City	10.3

Algebra II

Rank	System	'91–'90 Gain
1.	Mooresville City	19.7
2.	Albemarle City	17.4
3.	Clay County	16.9
4.	Jones County	16.5
5.	Yancey County	16.2
6.	Chapel Hill City	13.9
7.	Davie County	13.4
8.	Lexington City	12.5
9.	Kings Mountain City	12.1
10.	Orange County	11.0

Chemistry

Rank	System	'91–'90 Gain
1.	Mount Airy City	33.2
2.	Chapel Hill City	24.7
3.	Hendersonville City	18.8
4.	Mooresville City	14.5
5.	Carteret County	12.2
6.	Perquimans County	11.5
7.	Polk County	10.3
8.	Cabarrus County	9.7
9.	New Hanover County	9.6
10.	West. Rockingham	9.5

Physics

Rank	System	'91–'90 Gain
1.	Newton City	8.9
2.	Elkin City	8.2
3.	Mount Airy City	6.5
4.	Perquimans County	6.4
5.	Whiteville City	6.2
6.	Gates County	5.1
7.	Hendersonville City	4.7
8.	Rockingham County	4.0
9.	Sampson County	3.5
10.	Harnett County	3.4

Section V : Results for 133 School Systems

80

Participation in the Next Course in the Mathematics and Science Sequences by School System

School System	Eighth Grade ADM 1987-88	N Tested Algebra I 1988-89	Percent ADM Taking Algebra I	N Tested Geometry 1989-90	Percent Algebra I Taking Geometry	N Tested Algebra II 1990-91	Percent Geometry Taking Algebra II	Eighth Grade ADM 1986-87	N Tested Biology 1988-89	Percent ADM Taking Biology	N Tested Chemistry 1989-90	Percent Biology Taking Chemistry	N Tested Physics 1990-91	Percent Chemistry Taking Physics
Alamance County	805	647	80.4	485	75.0	312	64.3	784	729	93.0	321	44.0	101	31.5
Burlington City	444	379	85.4	304	80.2	238	78.3	519	406	78.2	237	58.4	131	55.3
Alexander County	383	251	65.5	190	75.7	124	65.3	379	280	73.9	117	41.8	17	14.5
Alleghany County	127	73	57.5	65	89.0	50	76.9	130	122	93.8	65	53.3	11	16.9
Anson County	390	228	58.5	158	69.3	119	75.3	392	299	76.3	92	30.8	24	26.1
Ashe County	308	168	54.5	123	73.2	116	94.3	300	243	81.0	89	36.6	36	40.4
Avery County	215	146	67.9	98	67.1	60	61.2	243	208	85.6	70	33.7	27	38.6
Beaufort County	340	189	55.6	125	66.1	114	91.2	331	297	89.7	111	37.4	19	17.1
Washington City	279	215	77.1	159	74.0	105	66.0	285	266	93.3	136	51.1	29	21.3
Bertie County	355	300	84.5	177	59.0	121	68.4	285	245	86.0	61	24.9	9	14.8
Bladen County	463	341	73.7	259	76.0	182	70.3	497	436	87.7	175	40.1	42	24.0
Brunswick County	702	492	70.1	339	68.9	266	78.5	719	584	81.2	244	41.8	106	43.4
Buncombe County	1,662	1,295	77.9	844	65.2	759	89.9	1,771	1,597	90.2	641	40.1	212	33.1
Asheville City	337	234	69.4	197	84.2	178	90.4	315	263	83.5	133	50.6	33	24.8
Burke County	1,050	625	59.5	472	75.5	382	80.9	1,005	837	83.3	281	33.6	98	34.9
Cabarrus County	930	733	78.8	553	75.4	489	88.4	996	766	76.9	390	50.9	124	31.8
Kannapolis City	331	271	81.9	216	79.7	164	75.9	354	284	80.2	138	48.6	38	27.5
Caldwell County	959	552	57.6	411	74.5	301	73.2	944	737	78.1	199	27.0	47	23.6
Camden County	75	56	74.7	37	66.1	4	10.8	84	67	79.8	33	49.3	8	24.2
Carteret County	571	414	72.5	318	76.8	265	83.3	600	507	84.5	246	48.5	33	13.4
Caswell County	296	210	70.9	119	56.7	112	94.1	292	301	103.1	132	43.9	28	21.2
Catawba County	1,001	663	66.2	397	59.9	460	115.9	1,001	837	83.6	324	38.7	99	30.6
Hickory City	338	266	78.7	214	80.5	173	80.8	389	296	76.1	163	55.1	49	30.1
Newton City	231	163	70.6	118	72.4	118	100.0	240	189	78.8	92	48.7	53	57.6
Chatham County	396	339	85.6	265	78.2	152	57.4	450	398	88.4	147	36.9	35	23.8
Cherokee County	315	198	62.9	132	66.7	121	91.7	297	276	92.9	104	37.7	45	43.3
Chowan County	195	120	61.5	76	63.3	61	80.3	182	173	95.1	71	41.0	8	11.3
Clay County	101	106	105.0	86	81.1	52	60.5	122	107	87.7	47	43.9	12	25.5
Cleveland County	662	384	58.0	284	74.0	212	74.6	667	554	83.1	257	46.4	63	24.5
Kings Mountain City	321	223	69.5	170	76.2	125	73.5	339	269	79.4	93	34.6	19	20.4
Shelby City	252	181	71.8	154	85.1	121	78.6	236	233	98.7	153	65.7	23	15.0
Columbus County	626	313	50.0	241	77.0	165	68.5	658	609	92.6	222	36.5	87	39.2
Whiteville City	202	175	86.6	119	68.0	107	89.9	196	188	95.9	113	60.1	70	61.9
Craven County	1,000	717	71.7	518	72.2	409	79.0	994	926	93.2	313	33.8	104	33.2

Participation in the Next Course in the Mathematics and Science Sequences by School System

School System	Eighth Grade ADM 1987-88	N Tested Algebra I 1988-89	Percent ADM Taking Algebra I	N Tested Geometry 1989-90	Percent Algebra I Taking Geometry	N Tested Algebra II 1990-91	Percent Geometry Taking Algebra II	Eighth Grade ADM 1986-87	N Tested Biology 1988-89	Percent ADM Taking Biology	N Tested Chemistry 1989-90	Percent Biology Taking Chemistry	N Tested Physics 1990-91	Percent Chemistry Taking Physics
Cumberland County	3,135	2,553	81.4	1,864	73.0	1,469	78.8	3,251	3,133	96.4	1,246	39.8	319	25.6
Currituck County	178	109	61.2	76	69.7	62	81.6	167	144	86.2	36	25.0	17	47.2
Dare County	210	130	61.9	97	74.6	88	90.7	191	159	83.2	95	59.7	28	29.5
Davidson County	1,274	975	76.5	736	75.5	572	77.7	1,288	1,126	87.4	608	54.0	225	37.0
Lexington City	256	189	73.8	130	68.8	109	83.8	269	195	72.5	76	39.0	23	30.3
Thomasville City	185	136	73.5	80	58.8	62	77.5	196	159	81.1	56	35.2	6	10.7
Davie County	377	294	78.0	210	71.4	187	89.0	419	337	80.4	147	43.6	18	12.2
Duplin County	589	407	69.1	284	69.8	228	80.3	638	549	86.1	237	43.2	66	27.8
Durham County	1,376	1,144	83.1	930	81.3	740	79.6	1,339	1,223	91.3	621	50.8	238	38.3
Durham City	562	331	58.9	258	77.9	246	95.3	603	386	64.0	251	65.0	52	20.7
Edgecombe County	406	216	53.2	152	70.4	104	68.4	393	333	84.7	174	52.3	47	27.0
Tarboro City	257	141	54.9	121	85.8	101	83.5	219	186	84.9	113	60.8	20	17.7
Forsyth County	2,726	2,108	77.3	1,488	70.6	1,369	92.0	2,724	2,418	88.8	1,076	44.5	361	33.6
Franklin County	341	237	69.5	155	65.4	131	84.5	419	352	84.0	120	34.1	39	32.5
Franklinton City	108	62	57.4	37	59.7	31	83.8	123	108	87.8	21	19.4	8	38.1
Gaston County	2,494	1,735	69.6	1,236	71.2	951	76.9	2,760	2,385	86.4	972	40.8	277	28.5
Gates County	117	76	65.0	56	73.7	32	57.1	119	103	86.6	70	68.0	29	41.4
Graham County	94	93	98.9	53	57.0	48	90.6	114	102	89.5	28	27.5	5	17.9
Granville County	544	416	76.5	286	68.8	220	76.9	578	474	82.0	244	51.5	58	23.8
Greene County	212	156	73.6	95	60.9	81	85.3	227	183	80.6	58	31.7	18	31.0
Guilford County	1,778	1,490	83.8	1,220	81.9	1,071	87.8	1,954	1,789	91.6	940	52.5	203	21.6
Greensboro City	1,555	1,518	97.6	1,000	65.9	893	89.3	1,579	1,222	77.4	766	62.7	227	29.6
High Point City	619	419	67.7	259	61.8	234	90.3	596	527	88.4	179	34.0	51	28.5
Halifax County	519	242	46.6	158	65.3	134	84.8	557	446	80.1	127	28.5	35	27.6
Roanoke Rapids City	190	132	69.5	99	75.0	84	84.8	217	204	94.0	99	48.5	29	29.3
Weldon City	102	45	44.1	27	60.0	18	66.7	82	65	79.3	40	61.5	9	22.5
Harnett County	938	582	62.0	403	69.2	295	73.2	886	798	90.1	275	34.5	83	30.2
Haywood County	607	467	76.9	313	67.0	262	83.7	673	600	89.2	258	43.0	68	26.4
Henderson County	678	425	62.7	299	70.4	271	90.6	688	551	80.1	192	34.8	35	18.2
Hendersonville City	115	154	133.9	52	33.8	116	223.1	121	161	133.1	77	47.8	31	40.3
Hertford County	305	220	72.1	145	65.9	114	78.6	351	277	78.9	121	43.7	21	17.4
Hoke County	408	274	67.2	162	59.1	127	78.4	379	353	93.1	125	35.4	47	37.6
Hyde County	64	35	54.7	34	97.1	28	82.4	74	86	116.2	21	24.4	7	33.3
Iredell County	1,106	692	62.6	493	71.2	399	80.9	1,062	891	83.9	420	47.1	74	17.6

Participation in the Next Course in the Mathematics and Science Sequences by School System

School System	Eighth Grade ADM 1987-88	N Tested Algebra I 1988-89	Percent ADM Taking Algebra I	N Tested Geometry 1989-90	Percent Algebra I Taking Geometry	N Tested Algebra II 1990-91	Percent Geometry Taking Algebra II	Eighth Grade ADM 1986-87	N Tested Biology 1988-89	Percent ADM Taking Biology	N Tested Chemistry 1989-90	Percent Biology Taking Chemistry	N Tested Physics 1990-91	Percent Chemistry Taking Physics
Mooresville City	144	121	84.0	79	65.3	88	111.4	199	162	81.4	52	32.1	17	32.7
Jackson County	311	214	68.8	173	80.8	135	78.0	301	256	85.0	109	42.6	36	33.0
Johnston County	1,125	702	62.4	536	76.4	428	79.9	1,143	1,046	91.5	367	35.1	145	39.5
Jones County	102	105	102.9	70	66.7	47	67.1	122	115	94.3	37	32.2	5	13.5
Lee County	541	415	76.7	291	70.1	194	66.7	537	451	84.0	157	34.8	31	19.7
Lenoir County	507	378	74.6	257	68.0	203	79.0	535	462	86.4	213	46.1	11	5.2
Kinston City	371	247	66.6	179	72.5	149	83.2	404	312	77.2	118	37.8	41	34.7
Lincoln County	660	551	83.5	419	76.0	326	77.8	729	617	84.6	265	42.9	63	23.8
Macon County	274	144	52.6	102	70.8	99	97.1	243	199	81.9	83	41.7	16	19.3
Madison County	236	120	50.8	68	56.7	56	82.4	249	172	69.1	77	44.8	18	23.4
Martin County	441	334	75.7	260	77.8	223	85.8	454	406	89.4	188	46.3	76	40.4
McDowell County	579	342	59.1	243	71.1	168	69.1	582	483	83.0	161	33.3	16	9.9
Mecklenburg County	5,330	4,346	81.5	3,316	76.3	2,641	79.6	5,756	4,933	85.7	2,527	51.2	728	28.8
Mitchell County	190	145	76.3	82	56.6	71	86.6	198	158	79.8	37	23.4	13	35.1
Montgomery County	318	256	80.5	168	65.6	125	74.4	356	314	88.2	171	54.5	45	26.3
Moore County	668	450	67.4	308	68.4	227	73.7	650	545	83.8	288	52.8	66	22.9
Nash County	874	604	69.1	422	69.9	331	78.4	928	813	87.6	333	41.0	89	26.7
Rocky Mount City	414	236	57.0	168	71.2	137	81.5	454	350	77.1	122	34.9	35	28.7
New Hanover County	1,439	1,352	94.0	1,020	75.4	814	79.8	1,530	1,341	87.6	824	61.4	238	28.9
Northampton County	300	198	66.0	158	79.8	127	80.4	315	276	87.6	136	49.3	49	36.0
Onslow County	1,170	925	79.1	653	70.6	563	86.2	1,225	1,142	93.2	516	45.2	134	26.0
Orange County	417	272	65.2	247	90.8	172	69.6	417	294	70.5	178	60.5	31	17.4
Chapel Hill City	359	337	93.9	311	92.3	284	91.3	417	379	90.9	235	62.0	167	71.1
Pamlico County	153	91	59.5	79	86.8	55	69.6	161	139	86.3	45	32.4	13	28.9
Pasquotank County	393	309	78.6	215	69.6	157	73.0	385	339	88.1	144	42.5	12	8.3
Pender County	335	240	71.6	170	70.8	146	85.9	416	410	98.6	133	32.4	39	29.3
Perquimans County	117	104	88.9	79	76.0	64	81.0	125	89	71.2	39	43.8	18	46.2
Person County	408	308	75.5	227	73.7	185	81.5	425	396	93.2	96	24.2	23	24.0
Pitt County	1,265	929	73.4	740	79.7	604	81.6	1,231	1,062	86.3	467	44.0	178	38.1
Polk County	165	98	59.4	59	60.2	60	101.7	182	123	67.6	80	65.0	15	18.8
Randolph County	1,062	604	56.9	426	70.5	338	79.3	1,063	838	78.8	303	36.2	57	18.8
Asheboro City	260	220	84.6	174	79.1	150	86.2	287	256	89.2	131	51.2	19	14.5
Richmond County	715	506	70.8	352	69.6	226	64.2	719	550	76.5	225	40.9	42	18.7
Robeson County	1,953	1,137	58.2	751	66.1	578	77.0	2,026	1,525	75.3	668	43.8	121	18.1

Participation in the Next Course in the Mathematics and Science Sequences by School System

School System	Eighth Grade ADM 1987-88	N Tested Algebra I 1988-89	Percent ADM Taking Algebra I	N Tested Geometry 1989-90	Percent Algebra I Taking Geometry	N Tested Algebra II 1990-91	Percent Geometry Taking Algebra II	Eighth Grade ADM 1986-87	N Tested Biology 1988-89	Percent ADM Taking Biology	N Tested Chemistry 1989-90	Percent Biology Taking Chemistry	N Tested Physics 1990-91	Percent Chemistry Taking Physics
Rockingham County	305	207	67.9	141	68.1	106	75.2	256	232	90.6	114	49.1	31	27.2
Eden City	323	216	66.9	152	70.4	118	77.6	299	272	91.0	161	59.2	83	51.6
West. Rockingham	269	191	71.0	133	69.6	89	66.9	316	255	80.7	113	44.3	39	34.5
Reidsville City	283	188	66.4	104	55.3	116	111.5	306	261	85.3	110	42.1	15	13.6
Rowan County	1,202	922	76.7	762	82.6	621	81.5	1,178	854	72.5	476	55.7	105	22.1
Rutherford County	827	469	56.7	311	66.3	258	83.0	813	647	79.6	179	27.7	36	20.1
Sampson County	536	386	72.0	252	65.3	204	81.0	474	435	91.8	162	37.2	45	27.8
Clinton City	228	117	51.3	103	88.0	84	81.6	212	179	84.4	79	44.1	18	22.8
Scotland County	585	424	72.5	190	44.8	249	131.1	576	446	77.4	139	31.2	44	31.7
Stanly County	514	434	84.4	307	70.7	227	73.9	513	472	92.0	203	43.0	72	35.5
Albemarle City	140	121	86.4	104	86.0	109	104.8	136	147	108.1	89	60.5	24	27.0
Stokes County	505	341	67.5	229	67.2	192	83.8	559	486	86.9	193	39.7	31	16.1
Surry County	629	476	75.7	287	60.3	233	81.2	653	585	89.6	282	48.2	49	17.4
Elkin City	75	78	104.0	56	71.8	48	85.7	65	61	93.8	33	54.1	10	30.3
Mount Airy City	134	130	97.0	90	69.2	43	47.8	145	107	73.8	52	48.6	38	73.1
Swain County	108	119	110.2	86	72.3	63	73.3	156	125	80.1	69	55.2	17	24.6
Transylvania County	336	267	79.5	182	68.2	157	86.3	301	281	93.4	93	33.1	53	57.0
Tyrrell County	48	28	58.3	20	71.4	19	95.0	65	51	78.5	24	47.1	14	58.3
Union County	905	606	67.0	470	77.6	375	79.8	985	893	90.7	330	37.0	77	23.3
Monroe City	220	159	72.3	98	61.6	69	70.4	254	205	80.7	113	55.1	20	17.7
Vance County	533	281	52.7	198	70.5	151	76.3	578	513	88.8	170	33.1	54	31.8
Wake County	4,459	3,697	82.9	2,907	78.6	2,731	93.9	4,227	3,892	92.1	2,488	63.9	1,184	47.6
Warren County	241	152	63.1	95	62.5	71	74.7	239	231	96.7	65	28.1	10	15.4
Washington County	212	182	85.8	121	66.5	82	67.8	243	209	86.0	87	41.6	14	16.1
Watauga County	328	253	77.1	182	71.9	146	80.2	357	306	85.7	103	33.7	32	31.1
Wayne County	1,001	769	76.8	584	75.9	479	82.0	1,037	932	89.9	529	56.8	139	26.3
Goldsboro City	307	185	60.3	132	71.4	113	85.6	351	286	81.5	167	58.4	30	18.0
Wilkes County	833	576	69.1	430	74.7	300	69.8	860	752	87.4	274	36.4	85	31.0
Wilson County	879	596	67.8	406	68.1	326	80.3	945	748	79.2	283	37.8	79	27.9
Yadkin County	390	265	67.9	208	78.5	149	71.6	383	342	89.3	154	45.0	24	15.6
Yancey County	212	138	65.1	81	58.7	115	142.0	224	186	83.0	43	23.1	18	41.9

Comprehensive Results

	Algebra I							Geometry						
	Number Tested	Percent 8th Grade 89-90	Percent 9th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield	Number Tested	Percent 8th Grade 88-89	Percent 10th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield
Alamance County	594	78.7	71.2	40.1	66.9	52.6	47.6	421	55.3	58.5	39.8	66.4	36.7	34.3
Burlington City	514	105.1	98.5	39.5	65.8	69.2	60.4	362	72.3	77.5	40.8	68.1	49.2	44.0
Alexander County	230	68.0	68.7	41.8	69.7	47.4	44.3	177	45.3	50.7	38.5	64.2	29.1	27.3
Alleghany County	71	55.9	52.6	40.8	67.9	38.0	34.2	52	41.6	41.3	34.8	58.0	24.1	21.8
Anson County	202	58.2	58.9	39.9	66.5	38.7	33.7	155	36.7	38.0	37.3	62.2	22.8	19.3
Ashe County	192	71.6	69.8	45.0	75.0	53.7	52.1	111	38.9	42.0	44.9	74.9	29.2	28.4
Avery County	84	42.9	44.7	40.5	67.5	28.9	27.6	80	41.9	50.3	39.6	66.0	27.6	25.2
Beaufort County	222	67.1	63.4	39.1	65.2	43.7	37.0	114	34.3	40.3	35.8	59.7	20.5	17.1
Washington City	255	82.0	77.7	43.8	73.0	59.9	58.4	141	46.5	48.6	37.1	61.9	28.8	26.1
Bertie County	196	68.3	50.8	36.5	60.9	41.6	37.8	109	35.2	39.2	40.3	67.2	23.6	21.9
Bladen County	277	70.1	68.1	36.9	61.5	43.1	35.7	223	53.5	59.8	37.2	62.0	33.2	30.3
Brunswick County	499	81.1	74.4	35.0	58.3	47.3	35.6	344	52.9	57.2	35.1	58.5	31.0	25.5
Buncombe County	1,430	92.1	82.5	42.5	70.8	65.2	59.2	1,010	60.3	64.0	42.1	70.2	42.4	39.2
Asheville City	326	104.5	109.8	37.4	62.4	65.2	49.6	197	63.1	68.6	38.3	63.8	40.3	31.7
Burke County	702	80.0	83.5	41.3	68.9	55.1	49.8	499	49.2	55.3	38.4	64.0	31.5	28.9
Cabarrus County	717	78.9	76.0	43.0	71.7	56.6	54.3	549	58.7	63.5	43.1	71.8	42.1	40.6
Kannapolis City	147	49.7	51.8	42.5	70.8	35.2	33.2	169	50.1	57.1	31.3	52.1	26.1	19.3
Caldwell County	502	59.3	55.3	39.0	65.0	38.5	33.8	319	35.5	46.6	38.6	64.3	22.8	20.6
Camden County	58	87.9	81.7	44.4	74.0	65.0	62.8	74	91.4	85.1	39.1	65.2	59.6	52.3
Carteret County	458	77.0	75.8	41.6	69.4	53.4	47.8	334	56.1	58.9	40.1	66.8	37.5	34.6
Caswell County	190	69.1	66.9	37.7	62.8	43.4	37.9	130	42.3	46.8	35.9	59.8	25.3	21.4
Catawba County	680	71.0	67.9	44.1	73.4	52.1	49.3	474	48.8	51.1	43.3	72.2	35.2	33.9
Hickory City	285	87.2	79.2	41.3	68.9	60.1	53.3	222	67.1	72.8	40.9	68.2	45.7	42.4
Newton City	161	71.9	69.7	43.5	72.6	52.2	50.6	165	66.8	75.7	41.6	69.3	46.3	44.0
Chatham County	349	86.4	75.5	39.6	66.0	57.0	50.3	256	65.5	71.1	37.8	63.0	41.2	36.4
Cherokee County	193	62.5	59.9	47.1	78.6	49.1	48.6	131	43.0	50.6	42.2	70.3	30.2	28.8
Chowan County	160	103.9	87.9	44.1	73.5	76.4	74.9	106	53.3	58.6	40.2	66.9	35.6	33.3
Clay County	90	111.1	105.9	43.9	73.1	81.2	76.7	22	25.0	23.2	36.3	60.5	15.1	13.1
Cleveland County	362	57.8	55.9	40.6	67.7	39.1	33.0	331	48.4	51.4	37.5	62.5	30.2	26.2
Kings Mountain City	196	63.2	64.1	40.6	67.7	42.8	39.7	140	40.5	45.9	35.9	59.8	24.2	20.7
Shelby City	199	83.3	83.6	42.3	70.5	58.7	56.0	131	52.8	57.7	36.3	60.5	32.0	26.8
Columbus County	286	49.7	47.3	44.0	73.3	36.4	34.9	217	34.5	38.5	37.6	62.7	21.6	19.9
Whiteville City	173	90.1	85.6	39.9	66.5	59.9	54.0	109	55.1	60.9	37.8	63.1	34.7	30.9
Craven County	743	74.4	67.0	43.3	72.1	53.7	51.4	527	53.0	58.7	39.0	64.9	34.4	31.5
Cumberland County	2,777	89.9	87.8	38.6	64.4	57.9	49.3	2,108	68.0	64.2	35.5	59.2	40.3	33.3
Currituck County	141	74.2	73.4	46.4	77.3	57.4	57.4	92	62.6	62.6	41.1	68.5	42.9	40.5

Comprehensive Results

	Algebra I							Geometry						
	Number Tested	Percent 8th Grade 89-90	Percent 9th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield	Number Tested	Percent 8th Grade 88-89	Percent 10th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield
Dare County	187	88.2	77.6	49.5	82.5	72.8	72.0	141	63.2	70.9	51.0	85.0	53.7	53.4
Davidson County	874	75.6	72.4	40.3	67.1	50.7	45.6	691	57.7	61.9	37.2	62.1	35.8	31.7
Lexington City	133	63.6	65.2	38.0	63.4	40.3	35.2	158	72.8	90.3	35.2	58.6	42.7	33.2
Thomasville City	121	69.1	65.4	39.6	66.1	45.7	42.3	83	53.2	57.2	35.9	59.8	31.8	27.2
Davie County	301	75.4	82.5	43.8	73.1	55.1	52.0	198	54.5	58.4	40.2	67.0	36.5	34.9
Duplin County	416	74.0	67.6	40.9	68.2	50.5	45.6	277	48.2	51.5	35.4	59.1	28.5	23.2
Durham County	1,190	88.7	81.2	42.2	70.4	62.4	58.8	923	68.4	68.1	41.7	69.5	47.6	45.0
Durham City	439	88.2	78.3	30.6	51.1	45.0	25.1	285	51.8	57.3	29.7	49.5	25.7	16.5
Edgecombe County	312	80.6	64.3	38.2	63.6	51.3	43.4	177	49.2	54.3	35.6	59.3	29.2	25.0
Tarboro City	147	61.8	58.8	43.9	73.2	45.2	42.8	151	70.2	76.3	33.0	55.0	38.6	27.1
Forsyth County	2,044	79.9	72.5	41.7	69.5	55.5	49.2	1,561	58.4	58.4	39.8	66.3	38.7	35.0
Franklin County	246	75.7	68.0	40.6	67.7	51.2	46.7	174	47.8	56.1	36.9	61.5	29.4	25.3
Franklinton City	68	69.4	56.7	31.2	52.0	36.1	26.5	64	55.2	64.6	38.1	63.5	35.0	32.3
Gaston County	1,698	76.3	79.2	40.8	68.1	52.0	46.2	1,160	47.4	53.1	38.4	64.1	30.4	27.2
Gates County	86	75.4	72.3	42.6	70.9	53.5	51.6	69	51.5	54.8	42.7	71.2	36.7	35.6
Graham County	65	68.4	63.1	37.9	63.2	43.2	35.9	76	72.4	81.7	34.5	57.5	41.6	34.5
Granville County	426	90.1	76.8	37.6	62.7	56.5	49.2	298	58.7	68.3	36.4	60.7	35.6	31.5
Greene County	181	76.4	69.3	43.0	71.6	54.7	52.6	81	31.3	35.7	38.4	64.0	20.0	18.0
Guilford County	1,592	89.0	85.4	43.6	72.7	64.7	61.2	1,212	66.5	68.2	40.8	68.0	45.2	41.9
Greensboro City	1,175	79.3	75.2	41.4	68.9	54.6	49.0	865	59.9	61.7	39.3	65.5	39.3	34.4
High Point City	445	79.9	73.3	42.0	70.0	55.9	52.2	318	56.1	62.6	39.4	65.6	36.8	34.4
Halifax County	321	68.3	58.0	32.7	54.6	37.3	25.3	222	45.8	54.4	27.7	46.1	21.1	11.6
Roanoke Rapids City	67	31.9	32.1	44.8	74.6	23.8	23.1	114	57.0	61.3	40.7	67.9	38.7	36.3
Weldon City	67	65.7	53.2	29.7	49.5	32.5	16.5	69	62.7	88.5	29.6	49.4	31.0	18.0
Harnett County	517	57.8	56.7	43.3	72.1	41.7	39.8	379	42.0	47.8	37.2	62.0	26.0	22.9
Haywood County	422	72.3	74.6	40.4	67.3	48.6	44.3	323	55.6	61.4	39.9	66.5	37.0	34.3
Henderson County	445	66.5	69.9	42.6	71.0	47.2	44.7	300	44.2	45.2	41.2	68.7	30.4	29.1
Hendersonville City	111	85.4	70.3	41.9	69.8	59.6	52.6	105	106.1	83.3	43.2	72.0	76.4	74.2
Hertford County	333	102.8	83.7	32.6	54.3	55.8	37.4	180	57.5	62.3	32.4	54.0	31.1	23.3
Hoke County	249	69.0	61.3	39.0	65.0	44.8	39.3	169	42.1	47.5	36.7	61.2	25.8	21.7
Hyde County	69	104.5	88.5	38.2	63.7	66.6	57.9	30	38.5	42.9	38.6	64.3	24.7	22.3
Iredell County	699	74.8	70.9	39.8	66.4	49.7	44.3	544	52.8	59.2	37.7	62.8	33.2	28.3
Mooresville City	155	79.5	71.4	44.0	73.3	58.3	57.1	107	56.6	62.9	46.5	77.6	43.9	43.9
Jackson County	211	73.5	75.4	41.5	69.2	50.9	44.6	193	62.7	72.0	40.0	66.6	41.7	36.8
Johnston County	818	74.2	68.6	41.5	69.2	51.3	47.2	565	47.3	52.4	38.8	64.7	30.6	28.3
Jones County	97	80.2	70.3	36.8	61.3	49.1	39.0	68	48.9	57.6	35.4	59.0	28.9	23.3

Comprehensive Results

	Algebra I							Geometry						
	Number Tested	Percent 8th Grade 89-90	Percent 9th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield	Number Tested	Percent 8th Grade 88-89	Percent 10th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield
Lee County	477	87.7	87.8	40.7	67.9	59.5	53.9	287	51.4	57.2	37.8	63.0	32.4	29.0
Lenoir County	326	68.1	64.7	40.5	67.5	45.9	42.1	255	47.9	49.5	36.2	60.3	28.9	25.7
Kinston City	255	71.4	63.9	43.8	73.0	52.1	50.7	191	53.5	58.4	38.7	64.4	34.5	31.2
Lincoln County	387	58.9	57.0	37.3	62.1	36.6	31.3	374	55.2	61.8	35.3	58.9	32.5	26.0
Macon County	180	81.1	71.1	43.6	72.7	58.9	55.3	125	46.8	54.8	41.5	69.2	32.4	30.8
Madison County	135	64.9	60.5	37.6	62.7	40.7	33.5	107	49.3	56.0	39.0	65.1	32.1	29.4
Martin County	338	89.7	78.1	35.8	59.6	53.4	43.5	252	69.4	77.1	35.4	59.1	41.0	33.2
McDowell County	369	80.7	84.6	37.2	62.1	50.1	42.8	242	45.0	50.2	36.2	60.3	27.1	25.0
Mecklenburg County	4,293	82.8	83.5	40.4	67.3	55.7	48.0	3,086	56.3	58.1	39.4	65.7	37.0	33.4
Mitchell County	152	80.9	80.9	38.1	63.6	51.4	42.3	66	45.5	50.4	39.1	65.1	29.6	27.8
Montgomery County	229	73.6	66.2	39.4	65.7	48.4	41.8	148	45.4	55.2	34.3	57.2	26.0	21.1
Moore County	592	85.4	81.1	38.8	64.6	55.2	48.1	354	50.6	54.0	38.8	64.7	32.8	29.3
Nash County	698	79.4	80.6	40.9	68.2	54.2	49.1	417	43.8	48.5	39.0	65.1	28.5	25.8
Rocky Mount City	289	73.2	74.5	41.5	69.2	50.6	47.0	173	40.2	43.5	37.7	62.8	25.3	22.9
New Hanover County	978	73.3	60.5	42.3	70.5	51.6	47.4	952	66.8	69.5	39.0	65.0	43.4	38.7
Northampton County	179	65.3	65.6	38.4	64.0	41.8	35.5	150	50.3	62.0	30.5	50.9	25.6	18.6
Onslow County	926	76.3	70.4	42.2	70.3	53.7	49.7	645	55.6	59.0	40.5	67.5	37.5	35.2
Orange County	274	70.1	63.4	41.5	69.1	48.4	42.6	212	55.5	66.7	34.9	58.1	32.2	26.8
Chapel Hill City	429	109.7	107.3	47.9	79.8	87.6	85.9	342	79.4	76.0	46.7	77.8	61.7	60.3
Pamlico County	120	79.5	70.6	43.7	72.9	57.9	55.0	82	57.7	60.7	37.0	61.7	35.6	29.5
Pasquotank County	273	73.2	71.7	41.4	69.0	50.5	47.4	196	51.2	57.0	37.0	61.7	31.6	27.7
Pender County	225	60.0	54.9	38.9	64.8	38.9	34.7	187	52.8	53.4	34.7	57.8	30.5	24.5
Perquimans County	141	112.8	106.8	41.6	69.4	78.3	71.6	90	66.2	73.2	39.4	65.6	43.4	40.5
Person County	336	82.6	80.8	41.0	68.3	56.4	50.3	249	57.9	64.8	38.4	63.9	37.0	33.9
Pitt County	877	69.1	64.6	44.3	73.8	51.0	49.7	690	53.8	55.9	39.2	65.4	35.2	32.5
Polk County	122	82.4	75.8	39.2	65.4	53.9	48.6	67	38.5	51.9	43.0	71.6	27.6	26.3
Randolph County	606	62.7	59.9	42.4	70.7	44.3	42.1	408	39.6	45.7	40.2	67.0	26.5	25.5
Asheboro City	167	64.5	63.0	41.1	68.5	44.2	40.5	175	70.9	80.3	41.0	68.3	48.4	45.3
Richmond County	431	71.1	69.6	37.9	63.1	44.9	37.1	265	40.3	42.5	37.3	62.2	25.1	21.8
Robeson County	1,168	65.5	60.6	37.1	61.9	40.5	32.8	671	36.3	41.6	33.7	56.2	20.4	16.0
Rockingham County	183	74.1	69.1	39.0	65.0	48.2	40.5	119	44.9	49.0	35.7	59.5	26.7	22.2
Eden City	240	75.9	75.2	42.1	70.2	53.3	50.4	169	54.2	62.1	39.0	65.0	35.2	32.3
West. Rockingham	166	63.4	61.7	41.4	69.1	43.8	42.2	161	59.4	69.1	37.7	62.8	37.3	32.4
Reidsville City	227	95.8	100.9	38.0	63.3	60.6	53.4	124	45.1	45.9	33.9	56.5	25.5	18.7
Rowan County	900	76.9	71.8	41.0	68.3	52.5	47.8	763	60.1	66.6	36.1	60.2	36.2	29.4
Rutherford County	524	67.1	63.3	40.2	67.0	45.0	41.1	406	51.7	58.4	37.6	62.7	32.4	28.2

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Comprehensive Results

	Algebra I							Geometry						
	Number Tested	Percent 8th Grade 89-90	Percent 9th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield	Number Tested	Percent 8th Grade 88-89	Percent 10th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield
Sampson County	356	71.9	65.3	37.9	63.2	45.5	39.6	281	50.1	56.7	34.7	57.9	29.0	23.3
Clinton City	226	119.6	108.7	35.2	58.7	70.2	52.5	111	56.9	60.0	31.9	53.2	30.3	21.8
Scotland County	436	75.6	69.1	38.1	63.5	48.0	41.9	205	35.9	40.7	35.4	59.0	21.2	17.6
Stanly County	443	92.3	92.1	41.1	68.6	63.3	57.7	272	56.5	63.4	37.6	62.7	35.5	31.3
Albemarle City	148	107.2	89.7	43.2	72.0	77.2	68.9	131	86.8	81.9	46.0	76.7	66.5	65.0
Stokes County	333	72.2	71.2	38.9	64.9	46.9	41.7	215	40.3	47.9	34.8	58.0	23.4	19.3
Surry County	376	61.5	60.6	43.6	72.6	44.7	43.1	263	44.7	50.9	37.4	62.3	27.9	24.9
Elkin City	74	123.3	113.8	48.0	80.0	98.7	96.0	50	71.4	68.5	37.7	62.8	44.9	42.2
Mount Airy City	125	86.2	90.6	41.1	68.5	59.1	55.7	163	105.2	112.4	40.6	67.7	71.2	66.8
Swain County	85	74.6	62.5	38.5	64.1	47.8	38.8	76	60.3	60.8	38.1	63.4	38.2	36.2
Transylvania County	288	92.3	88.9	38.7	64.5	59.5	48.0	184	57.1	59.7	40.9	68.2	39.0	35.8
Tyrrell County	50	86.2	83.3	45.9	76.6	66.0	64.7	21	37.5	40.4	46.7	77.8	29.2	29.2
Union County	675	70.5	59.9	44.6	74.3	52.4	50.0	465	47.1	54.4	40.2	67.1	31.6	29.1
Monroe City	130	64.4	59.6	37.6	62.6	40.3	32.2	133	58.3	66.2	36.1	60.2	35.1	30.1
Vance County	384	69.2	68.4	37.4	62.4	43.2	36.0	238	43.4	49.0	34.2	57.0	24.8	20.5
Wake County	4,022	92.1	84.9	46.4	77.4	71.3	68.4	3,078	68.7	73.0	44.3	73.8	50.7	48.8
Warren County	154	71.6	54.8	35.8	59.6	42.7	34.7	113	44.5	49.8	34.1	56.9	25.3	20.4
Washington County	137	64.3	61.2	39.0	65.0	41.8	37.2	163	73.4	78.4	36.5	60.8	44.6	39.7
Watauga County	227	68.0	64.1	45.8	76.3	51.9	50.0	203	66.3	71.0	42.4	70.7	46.9	43.2
Wayne County	897	90.7	90.7	38.7	64.4	58.4	49.2	595	56.4	60.1	36.6	61.0	34.4	29.9
Goldsboro City	221	63.1	62.8	41.2	68.7	43.4	39.6	155	46.8	55.2	35.7	59.4	27.8	22.4
Wilkes County	579	75.5	71.7	39.0	65.1	49.1	45.2	362	44.6	51.1	35.6	59.4	26.5	23.3
Wilson County	573	68.4	58.1	45.3	75.5	51.6	49.8	423	47.3	53.3	39.7	66.2	31.3	29.5
Yadkin County	288	79.6	74.4	41.0	68.3	54.3	48.9	203	50.4	51.8	39.2	65.3	32.9	30.9
Yancey County	161	79.7	73.9	38.7	64.5	51.4	45.0	91	40.8	44.0	44.0	73.4	30.0	29.0

Comprehensive Results

	Algebra II							ELP						
	Number Tested	Percent 8th Grade 87-88	Percent 11th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield	Number Tested	Percent 8th Grade 89-90	Percent 9th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield
Alamance County	312	38.8	47.1	37.6	67.1	26.0	24.3	779	103.2	93.4	41.9	62.5	64.5	57.4
Burlington City	238	53.6	67.8	41.2	73.5	39.4	37.7	493	100.8	94.4	43.8	65.3	65.8	61.8
Alexander County	124	32.4	39.7	39.9	71.3	23.1	23.1	336	99.4	100.3	41.7	62.2	61.8	54.7
Alleghany County	50	39.4	44.6	37.6	67.2	26.5	26.5	112	88.2	83.0	41.6	62.0	54.7	48.8
Anson County	119	30.5	38.0	35.7	63.8	19.5	17.8	398	114.7	116.0	35.6	53.2	61.0	46.3
Ashe County	116	37.7	46.6	38.7	69.1	26.0	24.0	243	90.7	88.4	43.1	64.4	58.4	51.7
Avery County	60	27.9	34.7	39.3	70.1	19.6	19.2	174	88.8	92.6	44.6	66.6	59.1	54.4
Beaufort County	114	33.5	39.2	36.7	65.6	22.0	20.3	377	113.9	107.7	39.6	59.1	67.3	57.1
Washington City	105	37.6	42.7	37.6	67.1	25.3	22.8	350	112.5	106.7	39.8	59.4	66.8	53.3
Bertie County	121	34.1	43.2	35.6	63.6	21.7	19.7	226	78.7	58.5	42.3	63.2	49.8	46.7
Bladen County	182	39.3	45.5	36.3	64.9	25.5	24.4	397	100.5	97.5	38.4	57.4	57.7	48.2
Brunswick County	266	37.9	48.5	35.2	62.8	23.8	21.6	608	98.9	90.6	40.3	60.1	59.4	51.1
Buncombe County	759	45.7	53.7	39.8	71.0	32.4	31.3	1,583	102.0	91.3	44.5	66.4	67.7	62.8
Asheville City	178	52.8	60.5	35.9	64.1	33.9	29.1	338	108.3	113.8	43.2	64.5	69.9	61.4
Burke County	382	36.4	47.6	38.9	69.5	25.3	24.6	929	105.8	110.5	40.9	61.1	64.6	56.6
Cabarrus County	489	52.6	64.3	41.8	74.7	39.3	38.5	930	102.3	98.6	45.3	67.6	69.2	65.2
Kannapolis City	164	49.5	68.9	35.2	62.9	31.2	28.5	278	93.9	97.9	38.2	57.0	53.5	45.3
Caldwell County	301	31.4	49.3	38.0	67.9	21.3	20.3	723	85.4	79.7	42.3	63.2	53.9	48.3
Camden County	4	5.3	6.6	34.8	62.1	3.3	3.3	82	124.2	115.5	42.4	63.3	78.6	71.0
Carteret County	265	46.4	57.2	40.6	72.5	33.6	32.9	582	97.8	96.4	41.4	61.8	60.4	54.0
Caswell County	112	37.8	47.5	31.5	56.3	21.3	17.9	294	106.9	103.5	41.3	61.7	66.0	59.5
Catawba County	460	46.0	54.0	40.3	71.9	33.0	32.4	914	95.4	91.3	42.6	63.6	60.7	55.0
Hickory City	173	51.2	70.9	40.9	73.0	37.4	36.7	317	96.9	88.1	46.3	69.2	67.1	62.9
Newton City	118	51.1	66.3	38.4	68.5	35.0	33.5	220	98.2	95.2	40.2	60.0	58.9	50.9
Chatham County	152	38.4	46.9	42.8	76.4	29.3	29.1	350	86.6	75.8	40.6	60.6	52.5	47.3
Cherokee County	121	38.4	45.0	42.5	75.9	29.2	28.2	297	96.1	92.2	43.7	65.3	62.8	58.3
Chowan County	61	31.3	35.7	43.1	77.0	24.1	24.1	179	116.2	98.4	40.3	60.2	70.0	62.5
Clay County	52	51.5	61.9	40.4	72.1	37.1	35.7	78	96.3	91.8	43.6	65.0	62.6	60.2
Cleveland County	212	32.0	39.3	36.5	65.1	20.8	19.5	606	96.8	93.5	37.2	55.6	53.8	40.9
Kings Mountain City	125	38.9	52.5	38.6	68.9	26.8	26.0	266	85.8	86.9	39.8	59.5	51.1	41.7
Shelby City	121	48.0	53.5	36.3	64.8	31.1	27.5	221	92.5	92.9	44.3	66.1	61.1	53.9
Columbus County	165	26.4	29.7	37.4	66.8	17.6	16.8	622	108.0	102.8	38.5	57.5	62.1	51.4
Whiteville City	107	53.0	64.8	36.5	65.2	34.5	31.3	205	106.8	101.5	42.1	62.9	67.2	61.6
Craven County	409	40.9	50.5	39.5	70.5	28.8	28.0	1,013	101.5	91.3	43.7	65.2	66.2	59.9
Cumberland County	1,469	46.9	51.6	36.7	65.5	30.7	27.5	3,230	104.6	102.1	41.6	62.1	64.9	57.3
Currituck County	62	34.8	43.1	41.9	74.8	26.1	26.1	160	84.2	83.3	47.3	70.6	59.5	58.0

Comprehensive Results

	Algebra II							ELP						
	Number Tested	Percent 8th Grade 87-88	Percent 11th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield	Number Tested	Percent 8th Grade 89-90	Percent 9th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield
Dare County	88	41.9	49.7	44.7	79.8	33.4	33.1	237	111.8	98.3	49.2	73.4	82.1	79.3
Davidson County	572	44.9	53.1	36.9	66.0	29.6	26.8	1,174	101.6	97.2	42.3	63.1	64.1	57.4
Lexington City	109	42.6	57.1	32.1	57.3	24.4	20.4	169	80.9	82.8	41.1	61.3	49.6	43.4
Thomasville City	62	33.5	43.1	39.7	70.9	23.8	22.6	159	90.9	85.9	38.9	58.1	52.8	45.2
Davie County	187	49.6	60.3	39.8	71.0	35.2	34.8	348	87.2	95.3	41.2	61.4	53.6	46.0
Duplin County	228	38.7	46.4	36.5	65.3	25.3	22.2	542	96.4	88.1	39.9	59.5	57.4	50.1
Durham County	740	53.8	68.0	41.4	73.9	39.7	38.2	1,243	92.6	84.8	43.6	65.1	60.3	53.7
Durham City	246	43.8	75.5	30.7	54.9	24.0	18.6	390	78.3	69.5	34.8	51.9	40.6	29.6
Edgecombe County	104	25.6	32.9	39.1	69.7	17.9	17.0	413	106.7	85.2	36.0	53.7	57.3	45.1
Tarboro City	101	39.3	51.3	36.4	65.0	25.5	23.8	216	90.8	86.4	40.2	60.1	54.5	46.0
Forsyth County	1,369	50.2	54.3	39.6	70.7	35.5	33.9	2,618	102.3	92.8	42.9	64.0	65.5	57.9
Franklin County	131	38.4	50.8	36.4	65.1	25.0	23.7	318	97.8	87.8	41.8	62.4	61.1	56.1
Franklinton City	31	28.7	32.3	32.0	57.1	16.4	13.7	95	96.9	79.2	38.5	57.4	55.6	49.2
Gaston County	951	38.1	49.1	36.7	65.6	25.0	23.2	2,272	102.1	106.0	39.3	58.6	59.8	49.4
Gates County	32	27.4	32.7	42.6	76.0	20.8	20.8	123	107.9	103.4	35.4	52.8	57.0	41.7
Graham County	48	51.1	58.5	37.7	67.3	34.4	30.8	113	118.9	109.7	41.2	61.6	73.3	64.8
Granville County	220	40.4	51.5	37.8	67.5	27.3	24.9	447	94.5	80.5	40.4	60.3	57.0	48.8
Greene County	81	38.2	46.8	40.8	72.9	27.9	27.5	244	103.0	93.5	41.2	61.5	63.3	55.8
Guilford County	1,071	60.2	67.1	40.0	71.4	43.0	41.1	1,827	102.2	98.0	44.1	65.8	67.2	61.5
Greensboro City	893	57.4	71.4	37.7	67.3	38.6	35.4	1,380	93.1	88.3	43.3	64.7	60.2	54.5
High Point City	234	37.8	56.9	39.4	70.4	26.6	26.2	532	95.5	87.6	41.1	61.4	58.6	51.1
Halifax County	134	25.8	33.4	27.0	48.2	12.4	8.5	409	87.0	74.0	33.0	49.3	42.9	29.5
Roanoke Rapids City	84	44.2	46.4	40.0	71.3	31.5	30.0	202	96.2	96.7	46.6	69.6	66.9	65.0
Weldon City	18	17.6	30.0	30.4	54.3	9.6	8.5	95	93.1	75.4	33.6	50.2	46.8	33.5
Harnett County	295	31.4	39.8	40.1	71.5	22.5	21.6	858	96.0	94.1	39.6	59.0	56.6	47.3
Haywood County	262	43.2	51.2	37.1	66.3	28.6	26.4	583	99.8	103.0	42.7	63.7	63.6	56.4
Henderson County	271	40.0	47.7	41.4	74.0	29.6	29.5	593	88.6	93.1	44.1	65.7	58.2	52.7
Hendersonville City	116	100.9	93.5	38.2	68.2	68.8	63.5	118	90.8	74.7	51.9	77.5	70.3	69.8
Hertford County	114	37.4	48.9	31.4	56.1	21.0	18.0	373	115.1	93.7	36.5	54.4	62.6	47.0
Hoke County	127	31.1	45.4	41.1	73.3	22.8	22.6	340	94.2	83.7	37.4	55.8	52.6	43.0
Hyde County	28	43.8	58.3	33.2	59.4	26.0	22.3	74	112.1	94.9	38.2	57.0	63.9	53.5
Iredell County	399	36.1	44.8	36.1	64.5	23.3	20.9	885	94.8	89.8	41.2	61.5	58.3	51.6
Mooresville City	88	61.1	57.9	39.4	70.3	43.0	40.5	221	113.3	101.8	46.0	68.6	77.7	72.5
Jackson County	135	43.4	51.9	41.0	73.1	31.7	30.3	267	93.0	95.4	43.7	65.2	60.7	56.6
Johnston County	428	38.0	47.0	38.6	68.9	26.2	25.4	1,073	97.3	89.9	40.9	61.0	59.3	51.9
Jones County	47	46.1	56.0	37.7	67.4	31.1	29.7	26	21.5	18.8	32.0	47.8	10.3	6.3

Comprehensive Results

	Algebra II							ELP						
	Number Tested	Percent 8th Grade 87-88	Percent 11th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield	Number Tested	Percent 8th Grade 89-90	Percent 9th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield
Lee County	194	35.9	43.8	39.1	69.8	25.0	24.1	511	93.9	94.1	41.4	61.7	58.0	50.7
Lenoir County	203	40.0	48.7	36.5	65.2	26.1	24.0	494	103.1	98.0	41.0	61.2	63.1	55.1
Kinston City	149	40.2	51.0	39.1	69.8	28.0	26.9	358	100.3	89.7	38.3	57.1	57.3	46.7
Lincoln County	326	49.4	59.3	37.8	67.5	33.3	30.8	629	95.7	92.6	38.8	57.9	55.4	44.8
Macon County	99	36.1	44.6	39.3	70.1	25.3	24.8	172	77.5	68.0	44.7	66.7	51.7	49.6
Madison County	56	23.7	29.9	43.6	77.8	18.5	17.8	203	97.6	91.0	41.9	62.5	61.0	53.8
Martin County	223	50.6	62.1	34.2	61.1	30.9	28.3	382	101.3	88.2	40.0	59.7	60.5	50.0
McDowell County	168	29.0	36.8	36.0	64.4	18.7	17.5	459	100.4	105.3	40.9	61.0	61.3	53.0
Mecklenburg County	2,641	49.5	60.3	39.4	70.4	34.9	32.9	4,650	89.6	90.4	40.1	59.8	53.6	45.5
Mitchell County	71	37.4	50.0	35.1	62.7	23.4	21.1	176	93.6	93.6	43.4	64.7	60.6	58.2
Montgomery County	125	39.3	47.7	36.2	64.6	25.4	23.0	299	96.1	86.4	42.8	63.9	61.4	55.7
Moore County	227	34.0	40.2	37.1	66.2	22.5	20.2	694	100.1	95.1	41.1	61.3	61.4	53.4
Nash County	331	37.9	44.1	39.8	71.0	26.9	25.7	886	100.8	102.3	39.8	59.4	59.9	49.5
Rocky Mount City	137	33.1	48.6	39.1	69.8	23.1	22.3	405	102.5	104.4	40.0	59.7	61.2	51.4
New Hanover County	814	56.6	71.4	39.4	70.4	39.8	38.6	1,419	106.3	87.8	44.7	66.8	71.0	66.5
Northampton County	127	42.3	55.2	33.3	59.4	25.1	22.0	249	90.9	91.2	35.9	53.6	48.7	37.2
Onslow County	563	48.1	59.2	39.6	70.8	34.1	31.8	1,366	112.6	103.9	42.6	63.6	71.6	65.9
Orange County	172	41.2	64.9	42.3	75.6	31.2	30.6	368	94.1	85.2	43.0	64.2	60.4	55.7
Chapel Hill City	284	79.1	81.1	46.1	82.2	65.0	64.3	413	105.6	103.3	47.2	70.5	74.5	69.6
Pamlico County	55	35.9	43.0	41.0	73.2	26.3	25.8	165	109.3	97.1	42.1	62.8	68.6	61.1
Pasquotank County	157	39.9	46.0	38.4	68.6	27.4	25.5	238	63.8	62.5	41.4	61.8	39.4	35.1
Pender County	146	43.6	49.8	34.5	61.6	26.8	23.7	371	98.9	90.5	39.8	59.3	58.7	51.4
Perquimans County	64	54.7	62.1	39.0	69.6	38.1	37.5	135	108.0	102.3	38.8	57.9	62.5	52.3
Person County	185	45.3	51.2	39.8	71.1	32.2	31.7	404	99.3	97.1	42.5	63.5	63.0	56.9
Pitt County	604	47.7	57.2	40.9	73.1	34.9	34.3	1,248	98.3	91.9	41.8	62.4	61.4	53.5
Polk County	60	36.4	49.6	38.1	68.1	24.8	24.4	132	89.2	82.0	40.2	60.1	53.6	46.3
Randolph County	338	31.8	46.8	40.8	72.8	23.2	22.7	848	87.7	83.9	43.4	64.8	56.8	52.3
Asheboro City	150	57.7	76.1	36.1	64.5	37.2	33.5	250	96.5	94.3	44.0	65.6	63.3	58.8
Richmond County	226	31.6	47.2	35.1	62.6	19.8	18.4	550	90.8	88.9	38.9	58.0	52.6	44.9
Robeson County	578	29.6	43.1	34.4	61.5	18.2	15.8	1,658	93.0	86.1	36.1	53.9	50.1	38.5
Rockingham County	106	34.8	47.3	37.0	66.1	23.0	21.5	252	102.0	95.1	41.6	62.1	63.4	56.3
Eden City	118	36.5	41.8	39.9	71.3	26.0	25.4	318	100.6	99.7	40.9	61.1	61.5	53.8
West. Rockingham	89	33.1	40.6	37.7	67.2	22.2	20.5	7	2.7	2.6	43.3	64.6	1.7	1.5
Reidsville City	116	41.0	56.3	35.6	63.6	26.1	22.9	229	96.6	101.8	41.1	61.4	59.3	53.6
Rowan County	621	51.7	66.1	36.7	65.5	33.8	30.8	1,128	96.3	90.0	40.4	60.3	58.1	47.7
Rutherford County	258	31.2	40.3	39.1	69.8	21.8	21.2	770	98.6	93.0	39.5	58.9	58.1	47.7

Comprehensive Results

	Algebra II							ELP						
	Number Tested	Percent 8th Grade 87-88	Percent 11th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield	Number Tested	Percent 8th Grade 89-90	Percent 9th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield
Sampson County	204	38.1	43.1	36.1	64.5	24.5	21.8	491	99.2	90.1	40.2	60.0	59.5	52.4
Clinton City	84	36.8	42.6	36.9	65.9	24.3	22.0	203	107.4	97.6	39.6	59.2	63.6	51.7
Scotland County	249	42.6	55.5	37.1	66.2	28.2	26.6	520	90.1	82.4	39.3	58.6	52.8	45.7
Stanly County	227	44.2	53.0	36.3	64.8	28.6	26.3	410	85.4	85.2	43.9	65.5	55.9	52.5
Albemarle City	109	77.9	80.7	41.2	73.7	57.4	53.7	160	115.9	97.0	43.4	64.7	75.0	69.4
Stokes County	192	38.0	46.8	36.5	65.1	24.8	22.4	487	105.6	104.1	38.2	57.1	60.3	48.7
Surry County	233	37.0	44.9	39.1	69.9	25.9	24.1	512	83.8	82.6	43.3	64.6	54.1	48.8
Elkin City	48	64.0	63.2	42.7	76.2	48.8	48.8	70	116.7	107.7	43.2	64.5	75.3	68.8
Mount Airy City	43	32.1	38.7	35.5	63.4	20.3	19.4	135	93.1	97.8	43.1	64.3	59.9	53.7
Swain County	63	58.3	67.7	36.7	65.6	38.3	34.6	104	91.2	76.5	48.8	72.8	66.4	63.9
Transylvania County	157	46.7	56.5	36.3	64.8	30.3	27.8	315	101.0	97.2	42.8	63.8	64.4	58.3
Tyrrell County	19	39.6	45.2	43.6	77.8	30.8	30.8	57	98.3	95.0	41.7	62.3	61.2	56.9
Union County	375	41.4	45.2	40.3	72.0	29.8	29.1	965	100.8	85.7	44.5	66.4	67.0	62.9
Monroe City	69	31.4	42.3	36.8	65.8	20.6	20.0	172	85.1	78.9	41.8	62.4	53.1	47.6
Vance County	151	28.3	40.6	35.7	63.8	18.1	17.2	566	102.0	100.9	39.7	59.2	60.4	51.5
Wake County	2,731	61.2	69.2	43.2	77.2	47.3	46.7	4,500	103.0	95.0	46.6	69.6	71.7	66.7
Warren County	71	29.5	39.2	38.6	68.9	20.3	20.0	253	117.7	90.0	39.7	59.2	69.7	61.7
Washington County	82	38.7	44.6	35.8	63.9	24.7	21.7	215	100.9	96.0	39.7	59.3	59.9	49.3
Watauga County	146	44.5	51.6	45.0	80.4	35.8	35.8	327	97.9	92.4	45.9	68.5	67.1	62.1
Wayne County	479	47.9	54.1	37.8	67.4	32.3	30.1	964	97.5	97.5	42.2	62.9	61.3	54.6
Goldsboro City	113	36.8	42.2	37.5	67.0	24.7	22.9	327	93.4	92.9	38.2	57.0	53.3	43.6
Wilkes County	300	36.0	47.0	37.6	67.2	24.2	22.7	725	94.5	89.8	41.1	61.3	57.9	50.2
Wilson County	326	37.1	48.3	39.4	70.4	26.1	25.3	848	101.2	86.0	40.7	60.8	61.5	51.8
Yadkin County	149	38.2	48.9	35.5	63.4	24.2	22.1	357	98.6	92.2	43.1	64.3	63.4	57.7
Yancey County	115	54.2	68.0	37.8	67.5	36.6	33.8	187	92.6	85.8	40.3	60.1	55.6	47.9

Comprehensive Results

	U.S. History							English I						
	Number Tested	Percent 8th Grade 87-88	Percent 11th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield	Number Tested	Percent 8th Grade 89-90	Percent 9th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield
Alamance County	678	84.2	102.3	40.4	67.4	56.8	51.5	733	97.1	87.9	65.9	65.9	64.0	56.9
Burlington City	347	78.2	98.9	42.5	70.8	55.3	51.7	460	94.1	88.1	71.3	71.3	67.1	64.3
Alexander County	288	75.2	92.3	40.8	68.0	51.1	47.8	325	96.2	97.0	67.0	67.0	64.4	58.1
Alleghany County	102	80.3	91.1	41.3	68.8	55.3	50.9	113	89.0	83.7	66.9	66.9	59.5	55.8
Anson County	292	74.9	93.3	35.7	59.5	44.5	35.2	326	93.9	95.0	61.2	61.2	57.5	49.0
Ashe County	223	72.4	89.6	41.0	68.3	49.5	45.5	241	89.9	87.6	68.6	68.6	61.7	57.1
Avery County	156	72.6	90.2	40.9	68.2	49.5	43.8	169	86.2	89.9	67.9	67.9	58.5	54.0
Beaufort County	290	85.3	99.7	37.4	62.4	53.2	44.8	348	105.1	99.4	62.0	62.0	65.2	57.5
Washington City	237	84.9	96.3	42.8	71.3	60.6	56.2	294	94.5	89.6	63.8	63.8	60.3	52.9
Bertie County	265	74.6	94.6	35.1	58.5	43.7	34.3	247	86.1	64.0	62.0	62.0	53.4	48.4
Bladen County	334	72.1	83.5	35.8	59.7	43.1	35.6	341	86.3	83.8	63.8	63.8	55.1	51.2
Brunswick County	514	73.2	93.6	37.9	63.2	46.3	41.1	562	91.4	83.8	62.3	62.3	56.9	51.4
Buncombe County	1,394	83.9	98.7	40.7	67.9	57.0	51.3	1,444	93.0	83.3	68.1	68.1	63.4	58.9
Asheville City	269	79.8	91.5	38.4	64.0	51.1	41.8	288	92.3	97.0	69.8	69.8	64.4	57.9
Burke County	805	76.7	100.2	39.6	65.9	50.5	44.1	817	93.1	97.1	63.6	63.6	59.2	51.7
Cabarrus County	799	85.9	105.0	42.3	70.4	60.5	56.9	832	91.5	88.2	71.9	71.9	65.8	63.8
Kannapolis City	234	70.7	98.3	38.4	63.9	45.2	40.2	243	82.1	85.6	59.6	59.6	48.9	43.3
Caldwell County	659	68.7	107.9	40.5	67.6	46.5	42.2	702	82.9	77.4	64.6	64.6	53.5	49.3
Camden County	63	84.0	103.3	39.3	65.6	55.1	48.1	69	104.5	97.2	65.2	65.2	68.2	64.2
Carteret County	467	81.8	100.9	42.4	70.7	57.8	56.1	541	90.9	89.6	63.5	63.5	57.7	50.9
Caswell County	265	89.5	112.3	38.1	63.5	56.8	51.5	277	100.7	97.5	59.4	59.4	59.8	51.0
Catawba County	798	79.7	93.7	39.7	66.1	52.7	47.0	863	90.1	86.2	67.9	67.9	61.2	56.0
Hickory City	214	63.3	87.7	44.3	73.8	46.7	44.5	291	89.0	80.8	71.2	71.2	63.4	59.7
Newton City	181	78.4	101.7	38.6	64.4	50.5	46.0	186	83.0	80.5	65.6	65.6	54.5	48.3
Chatham County	345	87.1	106.5	39.8	66.4	57.8	51.0	390	96.5	84.4	64.3	64.3	62.1	56.0
Cherokee County	274	87.0	101.9	40.9	68.2	59.3	53.9	279	90.3	86.6	71.7	71.7	64.7	62.7
Chowan County	183	93.8	107.0	38.6	64.3	60.3	52.1	167	108.4	91.8	66.5	66.5	72.1	67.4
Clay County	84	83.2	100.0	38.2	63.6	52.9	45.3	76	93.8	89.4	66.5	66.5	62.4	59.1
Cleveland County	510	77.0	94.4	40.6	67.7	52.2	47.8	545	87.1	84.1	61.0	61.0	53.1	44.1
Kings Mountain City	219	68.2	92.0	42.9	71.4	48.7	45.8	256	82.6	83.7	61.5	61.5	50.8	43.1
Shelby City	201	79.8	88.9	39.3	65.5	52.2	43.9	191	79.9	80.3	70.1	70.1	56.0	54.6
Columbus County	515	82.3	92.6	37.5	62.6	51.5	44.7	547	95.0	90.4	63.5	63.5	60.3	54.2
Whiteville City	153	75.7	92.7	43.9	73.2	55.4	53.3	174	90.6	86.1	76.2	76.2	69.1	68.7
Craven County	837	83.7	103.3	41.2	68.6	57.4	52.1	952	95.4	85.8	65.1	65.1	62.1	56.3
Cumberland County	2,784	88.8	97.9	38.9	64.8	57.5	49.8	2,801	90.7	88.6	66.4	66.4	60.2	56.2
Currituck County	139	78.1	96.5	41.0	68.3	53.3	49.9	172	90.5	89.6	72.1	72.1	65.3	64.9

Comprehensive Results

	U.S. History							English I						
	Number Tested	Percent 8th Grade 87-88	Percent 11th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield	Number Tested	Percent 8th Grade 89-90	Percent 9th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield
Dare County	178	84.8	100.6	43.9	73.2	62.0	61.3	206	97.2	85.5	72.3	72.3	70.3	67.2
Davidson County	1,063	83.4	98.7	39.7	66.2	55.2	50.0	1,126	97.4	93.2	66.7	66.7	65.0	59.4
Lexington City	181	70.7	94.8	39.7	66.2	46.8	40.9	174	83.3	85.3	68.1	68.1	56.7	51.8
Thomasville City	144	77.8	100.0	37.3	62.2	48.4	41.7	155	88.6	83.8	60.1	60.1	53.2	44.6
Davie County	289	76.7	93.2	44.4	74.0	56.7	55.4	348	87.2	95.3	71.4	71.4	62.3	59.8
Duplin County	481	81.7	98.0	39.0	65.0	53.1	47.9	507	90.2	82.4	64.5	64.5	58.2	54.1
Durham County	1,126	81.8	103.4	42.9	71.5	58.5	53.7	1,260	93.9	85.9	69.0	69.0	64.8	60.1
Durham City	298	53.0	91.4	34.4	57.4	30.4	22.6	360	72.3	64.2	57.1	57.1	41.3	34.5
Edgecombe County	329	81.0	104.1	38.5	64.2	52.0	45.4	380	98.2	78.4	62.0	62.0	60.9	54.5
Tarboro City	197	76.7	100.0	38.5	64.2	49.2	42.7	214	89.9	85.6	64.1	64.1	57.6	52.5
Forsyth County	2,306	84.6	91.5	40.3	67.1	56.8	49.8	2,398	93.7	85.0	67.5	67.5	63.3	57.6
Franklin County	289	84.8	112.0	37.9	63.2	53.6	45.4	312	96.0	86.2	66.2	66.2	63.6	57.8
Franklinton City	81	75.0	84.4	36.0	60.1	45.1	40.6	89	90.8	74.2	60.6	60.6	55.0	47.6
Gaston County	1,879	75.3	97.0	38.3	63.8	48.1	41.0	2,093	94.1	97.6	64.5	64.5	60.7	53.9
Gates County	106	90.6	108.2	40.4	67.3	61.0	53.5	112	98.2	94.1	57.2	57.2	56.2	45.7
Graham County	90	95.7	109.8	39.7	66.2	63.4	58.5	100	105.3	97.1	64.2	64.2	67.6	63.5
Granville County	410	75.4	96.0	38.3	[illegible]	48.2	42.5	423	89.4	76.2	66.9	66.9	59.8	54.9
Greene County	161	75.9	93.1	37.2	62.0	47.1	41.5	219	92.4	83.9	60.9	60.9	56.3	49.9
Guilford County	1,532	86.2	95.9	40.6	67.7	58.3	53.0	1,724	96.4	92.5	70.7	70.7	68.2	64.6
Greensboro City	1,249	80.3	99.8	41.6	69.4	55.7	51.2	1,309	88.3	83.7	67.0	67.0	59.2	54.8
High Point City	412	66.6	100.2	40.0	66.7	44.4	39.8	487	87.4	80.2	65.9	65.9	57.6	52.2
Halifax County	364	70.1	90.8	33.6	56.0	39.3	30.8	439	93.4	79.4	53.2	53.2	49.7	37.9
Roanoke Rapids City	173	91.1	95.6	44.2	73.7	67.1	64.8	189	90.0	90.4	74.4	74.4	67.0	64.8
Weldon City	63	61.8	105.0	31.8	52.9	32.7	22.8	85	83.3	67.5	59.4	59.4	49.5	42.5
Harnett County	707	75.4	95.4	38.6	64.3	48.5	41.9	808	90.4	88.6	66.4	66.4	60.0	56.4
Haywood County	518	85.3	101.2	40.2	67.0	57.2	50.9	539	92.3	95.2	66.2	66.2	61.1	56.0
Henderson County	522	77.0	91.9	40.9	68.2	52.5	48.6	567	84.8	89.0	68.9	68.9	58.4	55.1
Hendersonville City	108	93.9	87.1	40.2	66.9	62.8	55.8	145	111.5	91.8	71.1	71.1	79.3	77.1
Hertford County	261	85.6	112.0	35.6	59.3	50.7	41.4	320	98.8	80.4	57.4	57.4	56.7	44.3
Hoke County	283	69.4	101.1	36.0	60.0	41.6	32.8	328	90.9	80.8	64.9	64.9	59.0	53.8
Hyde County	55	85.9	114.6	42.0	70.0	60.2	56.9	60	90.9	76.9	66.5	66.5	60.5	58.4
Iredell County	880	79.6	98.9	37.7	62.9	50.0	42.5	869	93.0	88.1	63.5	63.5	59.1	51.7
Mooresville City	129	89.6	84.9	41.6	69.4	62.2	59.3	193	99.0	88.9	73.6	73.6	72.8	69.8
Jackson County	248	79.7	95.4	39.2	65.4	52.2	46.9	247	86.1	88.2	68.3	68.3	58.8	55.9
Johnston County	883	78.5	96.9	40.1	66.9	52.5	47.7	1,021	92.6	85.6	67.1	67.1	62.1	58.3
Jones County	55	53.9	65.5	38.8	64.7	34.9	31.1	117	96.7	84.8	58.4	58.4	56.5	45.9

Comprehensive Results

	U.S. History							English I						
	Number Tested	Percent 8th Grade 87-88	Percent 11th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield	Number Tested	Percent 8th Grade 89-90	Percent 9th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield
Lee County	422	78.0	95.3	39.9	66.6	52.0	45.5	515	94.7	94.8	65.9	65.9	62.4	57.1
Lenoir County	435	85.8	104.3	38.8	64.7	55.5	48.2	378	78.9	75.0	65.2	65.2	51.5	47.5
Kinston City	308	83.0	105.5	36.5	60.9	50.6	41.9	316	88.5	79.2	63.4	63.4	56.1	50.6
Lincoln County	524	79.4	95.3	38.7	64.6	51.3	44.8	485	73.8	71.4	67.2	67.2	49.6	46.0
Macon County	214	78.1	96.4	40.5	67.5	52.7	47.5	229	103.2	90.5	68.9	68.9	71.1	67.7
Madison County	181	76.7	96.8	40.9	68.1	52.2	47.0	207	99.5	92.8	61.9	61.9	61.6	50.9
Martin County	348	78.9	96.9	39.2	65.3	51.5	47.4	357	94.7	82.4	65.1	65.1	61.6	57.3
McDowell County	429	74.1	94.1	38.8	64.7	47.9	42.7	414	90.6	95.0	62.8	62.8	56.9	51.0
Mecklenburg County	4,311	80.9	98.4	39.8	66.4	53.7	46.9	4,666	90.0	90.8	65.1	65.1	58.6	52.3
Mitchell County	134	70.5	94.4	38.6	64.3	45.3	38.9	166	88.3	88.3	69.3	69.3	61.2	60.5
Montgomery County	238	74.8	90.8	42.8	71.3	53.4	49.6	282	90.7	81.5	69.7	69.7	63.2	60.5
Moore County	538	80.5	95.2	40.7	67.9	54.7	50.0	654	94.4	89.6	64.3	64.3	60.7	54.7
Nash County	735	84.1	97.9	39.3	65.5	55.1	48.0	836	95.1	96.5	62.3	62.3	59.3	50.8
Rocky Mount City	286	69.1	101.4	38.3	63.8	44.1	38.1	377	95.4	97.2	60.0	60.0	57.3	49.4
New Hanover County	1,169	81.2	102.5	42.8	71.4	58.0	54.7	1,340	100.4	82.9	72.0	72.0	72.3	69.5
Northampton County	239	79.7	103.9	37.9	63.2	50.3	43.8	237	86.5	86.8	57.0	57.0	49.3	38.1
Onslow County	977	83.5	102.7	40.1	66.8	55.8	50.6	1,164	96.0	88.5	66.4	66.4	63.7	60.4
Orange County	263	63.1	99.2	45.0	74.9	47.2	44.4	333	85.2	77.1	67.8	67.8	57.7	54.8
Chapel Hill City	403	112.3	115.1	42.5	70.8	79.5	70.0	371	94.9	92.8	76.0	76.0	72.1	68.8
Pamlico County	127	83.0	99.2	39.3	65.4	54.3	47.9	151	100.0	88.8	64.5	64.5	64.5	58.5
Pasquotank County	321	81.7	94.1	39.7	66.2	54.1	47.2	330	88.5	86.6	65.7	65.7	58.1	52.3
Pender County	292	87.2	99.7	37.4	62.4	54.4	46.8	339	90.4	82.7	66.1	66.1	59.8	56.1
Perquimans County	78	66.7	75.7	40.6	67.6	45.1	40.4	112	89.6	84.8	66.1	66.1	59.2	53.4
Person County	337	82.6	93.4	39.3	65.5	54.1	49.3	430	105.7	103.4	65.4	65.4	69.1	62.8
Pitt County	1,066	84.3	100.9	41.5	69.2	58.3	53.1	1,209	95.3	89.0	65.7	65.7	62.6	56.3
Polk County	118	71.5	97.5	38.4	64.0	45.8	41.9	140	94.6	87.0	69.3	69.3	65.6	59.9
Randolph County	726	68.4	100.6	42.7	71.1	48.6	45.8	811	83.9	80.2	67.6	67.6	56.7	53.8
Asheboro City	192	73.8	97.5	41.4	69.0	51.0	47.5	238	91.9	89.8	68.5	68.5	62.9	59.0
Richmond County	462	64.6	96.5	38.6	64.3	41.5	37.3	553	91.3	89.3	62.7	62.7	57.2	52.0
Robeson County	1,325	67.8	98.7	36.3	60.5	41.0	34.4	1,522	85.4	79.0	58.5	58.5	49.9	41.7
Rockingham County	233	76.4	104.0	40.6	67.6	51.6	45.9	237	96.0	89.4	66.1	66.1	63.4	59.1
Eden City	277	85.8	98.2	37.4	62.3	53.4	43.2	300	94.9	94.0	66.8	66.8	63.4	58.8
West. Rockingham	368	136.8	168.0	40.2	67.1	91.8	82.6	220	84.0	81.8	67.5	67.5	56.7	53.8
Reidsville City	202	71.4	98.1	37.1	61.8	44.1	37.1	201	84.8	89.3	69.0	69.0	58.5	55.0
Rowan County	894	74.4	95.2	39.6	65.9	49.0	43.9	1,012	86.4	80.7	65.8	65.8	56.9	51.5
Rutherford County	622	75.2	97.2	39.2	65.3	49.1	41.4	698	89.4	84.3	65.4	65.4	58.4	53.4

Comprehensive Results

	U.S. History							English I						
	Number Tested	Percent 8th Grade 87-88	Percent 11th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield	Number Tested	Percent 8th Grade 89-90	Percent 9th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield
Sampson County	**450**	**84.0**	**95.1**	**39.8**	**66.3**	**55.7**	**50.1**	**440**	**88.9**	**80.7**	**64.3**	**64.3**	**57.2**	**51.4**
Clinton City	**196**	**86.0**	**99.5**	**37.3**	**62.1**	**53.4**	**45.5**	**174**	**92.1**	**83.7**	**63.0**	**63.0**	**58.0**	**53.7**
Scotland County	**423**	**72.3**	**94.2**	**39.7**	**66.1**	**47.8**	**42.0**	**495**	**85.8**	**78.4**	**63.5**	**63.5**	**54.5**	**49.0**
Stanly County	375	73.0	87.6	40.2	67.0	48.9	44.4	416	86.7	86.5	70.4	70.4	61.0	59.4
Albemarle City	133	95.0	98.5	40.6	67.7	64.3	59.0	152	110.1	92.1	67.4	67.4	74.2	69.8
Stokes County	404	80.0	98.5	38.1	63.6	50.9	43.4	457	99.1	97.6	59.7	59.7	59.2	47.7
Surry County	**497**	**79.0**	**95.8**	**40.0**	**66.7**	**52.7**	**46.2**	**551**	**90.2**	**88.9**	**68.4**	**68.4**	**61.7**	**58.1**
Elkin City	**76**	**101.3**	**100.0**	**43.7**	**72.8**	**73.8**	**72.8**	**66**	**110.0**	**101.5**	**71.0**	**71.0**	**78.1**	**74.6**
Mount Airy City	**103**	**76.9**	**92.8**	**42.7**	**71.1**	**54.7**	**50.9**	**130**	**89.7**	**94.2**	**71.5**	**71.5**	**64.1**	**60.7**
Swain County	88	81.5	94.6	42.1	70.2	57.2	54.6	128	112.3	94.1	65.8	65.8	73.9	68.1
Transylvania County	276	82.1	99.3	40.4	67.4	55.4	49.9	296	94.9	91.4	66.2	66.2	62.8	56.7
Tyrrell County	39	81.3	92.9	38.4	64.1	52.1	49.4	55	94.8	91.7	66.1	66.1	62.7	57.0
Union County	**810**	**89.5**	**97.7**	**42.7**	**71.1**	**63.6**	**60.2**	**917**	**95.8**	**81.4**	**68.8**	**68.8**	**65.9**	**61.4**
Monroe City	**148**	**67.3**	**90.8**	**37.7**	**62.9**	**42.3**	**37.2**	**162**	**80.2**	**74.3**	**69.3**	**69.3**	**55.6**	**53.5**
Vance County	**401**	**75.2**	**107.8**	**36.9**	**61.6**	**46.3**	**38.6**	**496**	**89.4**	**88.4**	**61.3**	**61.3**	**54.8**	**49.0**
Wake County	3,852	86.4	97.7	44.6	74.3	64.2	61.3	4,139	94.7	87.4	72.2	72.2	68.4	65.0
Warren County	192	79.7	106.1	39.7	66.2	52.7	50.5	219	101.9	77.9	58.1	58.1	59.2	50.5
Washington County	192	90.6	104.3	38.3	63.8	57.8	50.0	192	90.1	85.7	67.8	67.8	61.1	57.3
Watauga County	**268**	**81.7**	**94.7**	**43.9**	**73.2**	**59.8**	**56.0**	**312**	**93.4**	**88.1**	**68.6**	**68.6**	**64.1**	**60.8**
Wayne County	**877**	**87.6**	**99.1**	**41.5**	**69.2**	**60.6**	**55.0**	**928**	**93.8**	**93.8**	**65.8**	**65.8**	**61.7**	**56.4**
Goldsboro City	**243**	**79.2**	**90.7**	**37.7**	**62.9**	**49.8**	**43.0**	**300**	**85.7**	**85.2**	**61.9**	**61.9**	**53.1**	**47.8**
Wilkes County	642	77.1	100.6	39.5	65.9	50.8	45.4	707	92.2	87.6	62.4	62.4	57.5	50.1
Wilson County	670	76.2	99.3	40.5	67.4	51.4	47.8	787	93.9	79.8	67.7	67.7	63.6	59.6
Yadkin County	294	75.4	96.4	41.8	69.7	52.5	49.3	350	96.7	90.4	69.3	69.3	67.0	63.6
Yancey County	**156**	**73.6**	**92.3**	**38.3**	**63.9**	**47.0**	**41.0**	**139**	**68.8**	**63.8**	**68.9**	**68.9**	**47.4**	**46.4**

Comprehensive Results

	Physical Science							Biology						
	Number Tested	Percent 8th Grade 89-90	Percent 9th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield	Number Tested	Percent 8th Grade 88-89	Percent 10th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield
Alamance County	550	72.8	65.9	39.3	57.8	42.1	34.7	704	92.5	97.8	41.3	62.5	57.8	54.4
Burlington City	293	59.9	56.1	42.5	62.4	37.4	33.3	510	101.8	109.2	44.1	66.8	68.0	65.1
Alexander County	276	81.7	82.4	42.5	62.5	51.0	46.8	281	71.9	80.5	42.2	63.9	45.9	42.3
Alleghany County	91	71.7	67.4	34.8	51.2	36.7	28.2	116	92.8	92.1	40.5	61.4	57.0	54.5
Anson County	344	99.1	100.3	34.6	50.9	50.5	38.6	388	91.9	95.1	35.3	53.5	49.2	39.9
Ashe County	249	92.9	90.5	44.8	65.9	61.2	57.5	244	85.6	92.4	42.2	63.9	54.7	52.0
Avery County	174	88.8	92.6	42.2	62.1	55.1	50.1	151	79.1	95.0	42.3	64.0	50.6	45.9
Beaufort County	402	121.5	114.9	36.5	53.7	65.2	51.8	260	78.3	91.9	38.3	58.1	45.5	39.2
Washington City	253	81.4	77.1	37.4	54.9	44.7	35.8	281	92.7	96.9	42.0	63.6	59.0	55.4
Bertie County	240	83.6	62.2	30.8	45.3	37.9	24.0	298	96.1	107.2	39.3	59.5	57.2	50.7
Bladen County	362	91.6	88.9	38.3	56.4	51.7	43.4	358	85.9	96.0	38.4	58.3	50.1	45.0
Brunswick County	488	79.3	72.7	38.5	56.6	44.9	39.4	567	87.2	94.3	40.7	61.7	53.8	50.4
Buncombe County	1,449	93.4	83.6	41.1	60.5	56.5	48.9	1,549	92.5	98.2	43.2	65.5	60.6	57.6
Asheville City	163	52.2	54.9	34.1	50.1	26.2	18.3	252	80.8	87.8	40.1	60.8	49.1	43.3
Burke County	881	100.3	104.8	40.3	59.3	59.5	50.8	910	89.7	100.9	41.0	62.0	55.6	50.8
Cabarrus County	870	95.7	92.3	46.0	67.6	64.7	61.9	849	90.7	98.2	44.1	66.9	60.7	59.0
Kannapolis City	249	84.1	87.7	37.3	54.9	46.2	38.2	271	80.4	91.6	38.1	57.8	46.5	42.2
Caldwell County	551	65.1	60.7	40.4	59.3	38.6	33.4	763	85.0	111.5	41.6	63.1	53.6	50.7
Camden County	77	116.7	108.5	36.7	53.9	62.9	46.6	81	100.0	93.1	41.7	63.1	63.1	59.2
Carteret County	395	66.4	65.4	41.1	60.4	40.1	36.0	461	77.5	81.3	42.2	64.0	49.6	46.8
Caswell County	286	104.0	100.7	40.4	59.4	61.8	51.0	274	89.3	98.6	38.3	58.0	51.8	47.6
Catawba County	814	85.0	81.3	43.8	64.4	54.7	51.1	852	87.7	91.9	42.8	64.8	56.8	53.8
Hickory City	251	76.8	69.7	42.6	62.6	48.1	43.8	288	87.0	94.4	45.8	69.3	60.3	58.0
Newton City	189	84.4	81.8	43.4	63.8	53.8	50.1	212	85.8	97.2	42.4	64.3	55.2	51.5
Chatham County	362	89.6	78.4	39.9	58.7	52.6	45.0	365	93.4	101.4	41.1	62.3	58.2	54.8
Cherokee County	293	94.8	91.0	43.9	64.6	61.3	56.9	185	60.7	71.4	44.7	67.7	41.1	39.7
Chowan County	185	120.1	101.6	42.0	61.8	74.2	71.8	190	95.5	105.0	40.8	61.7	58.9	55.2
Clay County	57	70.4	67.1	44.6	65.6	46.2	45.4	77	87.5	81.1	41.9	63.5	55.6	53.4
Cleveland County	499	79.7	77.0	34.3	50.5	40.3	28.7	664	97.1	103.1	40.0	60.6	58.8	53.2
Kings Mountain City	237	76.5	77.5	39.5	58.1	44.4	36.7	297	85.8	97.4	39.7	60.1	51.6	45.0
Shelby City	168	70.3	70.6	38.3	56.3	39.6	33.7	211	85.1	93.0	42.4	64.3	54.7	51.3
Columbus County	593	103.0	98.0	37.6	55.3	56.9	45.6	578	91.9	102.7	37.2	56.3	51.7	44.9
Whiteville City	181	94.3	89.6	41.6	61.2	57.7	52.6	178	89.9	99.4	42.6	64.5	58.0	54.4
Craven County	1,043	104.5	94.0	40.1	59.0	61.7	52.5	855	86.0	95.2	40.9	62.0	53.3	48.6
Cumberland County	2,254	73.0	71.3	37.0	54.4	39.7	31.9	2,889	93.3	88.0	39.9	60.5	56.4	51.8
Currituck County	124	65.3	64.6	47.4	69.7	45.5	45.5	142	96.6	96.6	45.4	68.8	66.5	64.1

Comprehensive Results

	Physical Science							Biology						
	Number Tested	Percent 8th Grade 89-90	Percent 9th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield	Number Tested	Percent 8th Grade 88-89	Percent 10th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield
Dare County	213	100.5	88.4	49.1	72.2	72.5	69.5	173	77.6	86.9	47.9	72.5	56.2	56.2
Davidson County	920	79.6	76.2	39.7	58.3	46.4	40.3	1,037	86.6	92.8	41.6	63.1	54.7	51.3
Lexington City	173	82.8	84.8	38.5	56.6	46.9	39.3	173	79.7	98.9	40.3	61.1	48.7	43.6
Thomasville City	124	70.9	67.0	35.5	52.3	37.1	26.3	137	87.8	94.5	37.5	56.8	49.9	41.9
Davie County	345	86.5	94.5	41.9	61.6	53.3	47.7	285	78.5	84.1	42.9	65.0	51.0	48.2
Duplin County	474	84.3	77.1	38.6	56.7	47.8	41.2	516	89.7	95.9	39.2	59.4	53.3	47.4
Durham County	1,024	76.3	69.8	41.0	60.3	46.0	39.8	1,294	95.9	95.5	43.6	66.0	63.3	59.5
Durham City	294	59.0	52.4	33.0	48.5	28.6	19.4	378	68.7	76.1	35.3	53.5	36.8	30.2
Edgecombe County	287	74.2	59.2	41.1	60.4	44.8	40.6	339	94.2	104.0	39.2	59.4	55.9	50.3
Tarboro City	254	106.7	101.6	39.5	58.0	61.9	50.9	200	93.0	101.0	39.6	60.0	55.8	51.1
Forsyth County	789	30.8	28.0	41.8	61.5	19.0	17.8	2,315	86.5	86.7	41.4	62.7	54.3	49.4
Franklin County	218	67.1	60.2	45.3	66.6	44.7	43.2	299	82.1	96.5	39.9	60.4	49.6	45.3
Franklinton City	67	68.4	55.8	41.2	60.5	41.4	37.7	96	82.8	97.0	41.9	63.6	52.6	51.0
Gaston County	1,975	88.8	92.1	39.2	57.6	51.1	42.2	2,107	86.2	96.4	39.5	59.8	51.5	45.3
Gates County	118	103.5	99.2	38.1	56.1	58.1	47.2	120	89.6	95.2	38.0	57.6	51.6	43.8
Graham County	104	109.5	101.0	37.5	55.2	60.4	47.1	98	93.3	105.4	46.9	71.1	66.4	62.3
Granville County	432	91.3	77.8	36.9	54.2	49.5	39.4	442	87.0	101.4	39.1	59.2	51.5	45.6
Greene County	232	97.9	88.9	39.2	57.6	56.4	49.3	221	85.3	97.4	38.1	57.7	49.2	45.2
Guilford County	1,459	81.6	78.3	42.4	62.3	50.8	46.1	1,682	92.3	94.7	42.5	64.4	59.5	56.4
Greensboro City	1,283	86.6	82.1	41.8	61.5	53.2	47.5	1,226	85.0	87.4	40.9	62.0	52.7	48.4
High Point City	421	75.6	69.4	41.7	61.3	46.3	41.2	496	87.5	97.6	41.2	62.5	54.7	49.8
Halifax County	428	91.1	77.4	32.7	48.1	43.8	28.3	442	91.1	108.3	32.1	48.7	44.4	33.1
Roanoke Rapids City	151	71.9	72.2	41.7	61.4	44.1	41.2	176	88.0	94.6	47.4	71.8	63.2	62.8
Weldon City	108	105.9	85.7	30.8	45.3	48.0	30.2	72	65.5	92.3	32.2	48.9	32.0	22.7
Harnett County	464	51.9	50.9	37.3	54.9	28.5	22.8	797	88.3	100.5	40.4	61.2	54.0	48.3
Haywood County	557	95.4	98.4	41.7	61.3	58.5	49.4	541	93.1	102.9	41.1	62.3	58.0	53.9
Henderson County	608	90.9	95.4	42.1	62.0	56.3	49.1	587	86.6	88.5	42.3	64.0	55.4	52.1
Hendersonville City	119	91.5	75.3	41.4	60.8	55.7	48.6	117	118.2	92.9	45.1	68.4	80.8	76.7
Hertford County	338	104.3	84.9	33.6	49.4	51.5	36.0	160	51.1	55.4	39.1	59.2	30.3	27.6
Hoke County	298	82.5	73.4	34.2	50.2	41.4	30.6	325	81.0	91.3	38.5	58.3	47.3	42.2
Hyde County	70	106.1	89.7	40.2	59.2	62.8	56.5	70	89.7	100.0	36.4	55.2	49.5	41.0
Iredell County	580	62.1	58.8	42.9	63.1	39.2	35.7	846	82.1	92.1	39.1	59.2	48.6	43.1
Mooresville City	143	73.3	65.9	40.9	60.1	44.1	38.2	213	112.7	125.3	44.6	67.5	76.1	75.0
Jackson County	248	86.4	88.6	44.8	65.9	56.9	53.3	254	82.5	94.8	42.0	63.6	52.4	48.7
Johnston County	1,050	95.2	88.0	40.5	59.6	56.7	49.0	1,057	88.5	98.0	42.2	64.0	56.7	53.7
Jones County	140	115.7	101.4	36.6	53.8	62.2	49.8	106	76.3	89.8	38.5	58.3	44.5	41.1

Comprehensive Results

	Physical Science							Biology						
	Number Tested	Percent 8th Grade 89-90	Percent 9th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield	Number Tested	Percent 8th Grade 88-89	Percent 10th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield
Lee County	515	94.7	94.8	39.4	57.9	54.8	45.4	444	79.6	88.4	39.5	59.9	47.7	41.8
Lenoir County	402	83.9	79.8	36.8	54.1	45.4	37.4	508	95.5	98.6	38.4	58.1	55.5	50.2
Kinston City	283	79.3	70.9	34.8	51.2	40.6	31.4	343	96.1	104.9	39.1	59.3	57.0	50.3
Lincoln County	575	87.5	84.7	39.8	58.6	51.3	42.9	556	82.1	91.9	40.1	60.7	49.9	44.4
Macon County	237	106.8	93.7	43.2	63.5	67.8	62.6	233	87.3	102.2	43.3	65.5	57.2	55.4
Madison County	178	85.6	79.8	35.4	52.0	44.5	34.8	162	74.7	84.8	40.7	61.6	46.0	42.9
Martin County	383	101.6	88.5	39.0	57.4	58.3	49.6	308	84.8	94.2	37.6	56.9	48.3	43.9
McDowell County	429	93.9	98.4	39.1	57.5	54.0	45.7	415	77.1	86.1	40.8	61.9	47.7	44.5
Mecklenburg County	4,591	88.5	89.3	40.6	59.9	53.0	44.9	4,684	85.4	88.1	41.1	62.3	53.2	48.6
Mitchell County	123	65.4	65.4	42.3	62.1	40.6	36.3	180	124.1	137.4	40.2	61.0	75.7	71.1
Montgomery County	149	47.9	43.1	35.9	52.8	25.3	21.1	250	76.7	93.3	38.9	59.0	45.2	40.7
Moore County	570	82.3	78.1	38.0	55.8	45.9	39.5	621	88.8	94.7	39.5	59.8	53.1	48.1
Nash County	839	95.4	96.9	36.6	53.8	51.4	39.5	918	96.4	106.7	39.3	59.5	57.4	49.7
Rocky Mount City	377	95.4	97.2	34.5	50.7	48.4	33.5	338	78.6	84.9	38.6	58.4	45.9	40.5
New Hanover County	574	43.0	35.5	39.3	57.8	24.9	22.1	1,438	100.8	105.0	42.5	64.4	64.9	61.7
Northampton County	217	79.2	79.5	34.4	50.6	40.1	29.4	230	77.2	95.0	35.1	53.2	41.1	34.5
Onslow County	1,035	85.3	78.7	40.2	59.0	50.3	44.3	1,033	89.0	94.5	41.9	63.5	56.5	53.5
Orange County	354	90.5	81.9	43.4	63.9	57.9	52.5	278	72.8	87.4	42.2	63.9	46.5	44.2
Chapel Hill City	359	91.8	89.8	46.0	67.6	62.1	58.6	411	95.4	91.3	46.8	70.9	67.6	65.0
Pamlico County	77	51.0	45.3	43.6	64.2	32.7	31.5	132	93.0	97.8	41.8	63.3	58.8	53.5
Pasquotank County	348	93.3	91.3	43.6	64.1	59.8	53.4	323	84.3	93.9	42.4	64.2	54.1	51.5
Pender County	394	105.1	96.1	38.8	57.1	60.0	51.5	304	85.9	86.9	37.8	57.3	49.2	43.1
Perquimans County	135	108.0	102.3	38.0	55.8	60.3	48.7	108	79.4	87.8	41.0	62.2	49.4	47.1
Person County	405	99.5	97.4	40.5	59.5	59.2	51.6	386	89.8	100.5	42.2	64.0	57.5	54.3
Pitt County	1,367	107.7	100.7	41.4	60.8	65.5	58.4	1,157	90.2	93.8	41.9	63.5	57.3	53.4
Polk County	96	64.9	59.6	38.6	56.8	36.8	31.9	120	69.0	93.0	41.2	62.5	43.1	39.5
Randolph County	343	35.5	33.9	44.3	65.1	23.1	21.7	851	82.5	95.3	42.3	64.0	52.8	50.8
Asheboro City	209	80.7	78.9	39.3	57.8	46.6	41.3	171	69.2	78.4	42.8	64.9	44.9	43.4
Richmond County	522	86.1	84.3	39.4	57.9	49.9	43.0	500	76.0	80.3	40.4	61.2	46.5	43.1
Robeson County	1,609	90.2	83.5	35.6	52.3	47.2	35.0	1,347	72.9	83.6	37.6	57.0	41.5	37.1
Rockingham County	233	94.3	87.9	42.1	61.9	58.4	52.6	240	90.6	98.8	39.7	60.2	54.5	49.5
Eden City	304	96.2	95.3	39.4	57.9	55.7	46.5	267	85.6	98.2	40.0	60.6	51.9	47.8
West. Rockingham	183	69.8	68.0	34.8	51.2	35.8	26.4	216	79.7	92.7	39.1	59.2	47.2	42.8
Reidsville City	186	78.5	82.7	38.1	56.1	44.0	38.6	234	85.1	86.7	36.4	55.1	46.9	39.3
Rowan County	870	74.3	69.4	37.4	54.9	40.8	32.1	1,151	90.7	100.5	40.9	62.0	56.2	52.0
Rutherford County	439	56.2	53.0	44.9	66.1	37.2	35.5	635	80.9	91.4	41.7	63.2	51.1	48.1

Comprehensive Results

	Physical Science							Biology						
	Number Tested	Percent 8th Grade 89-90	Percent 9th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield	Number Tested	Percent 8th Grade 88-89	Percent 10th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield
Sampson County	477	96.4	87.5	40.2	59.1	57.0	49.9	504	89.8	101.6	39.3	59.6	53.5	48.4
Clinton City	194	102.6	93.3	37.0	54.4	55.8	45.5	183	93.8	98.9	37.1	56.2	52.7	45.8
Scotland County	436	75.6	69.1	37.0	54.4	41.1	33.9	512	89.7	101.6	37.1	56.2	50.4	43.2
Stanly County	345	71.9	71.7	44.3	65.2	46.9	44.7	426	88.6	99.3	42.1	63.8	56.5	53.9
Albemarle City	132	95.7	80.0	40.6	59.7	57.1	51.5	149	98.7	93.1	43.5	65.9	65.0	63.7
Stokes County	447	97.0	95.5	35.7	52.5	50.9	39.1	443	83.0	98.7	38.7	58.7	48.7	44.0
Surry County	365	59.7	58.9	38.8	57.1	34.1	29.3	527	89.6	101.9	41.4	62.7	56.2	52.3
Elkin City	43	71.7	66.2	44.4	65.3	46.8	44.6	71	101.4	97.3	46.7	70.8	71.8	69.8
Mount Airy City	114	78.6	82.6	42.7	62.8	49.4	45.9	138	89.0	95.2	43.1	65.4	58.2	55.3
Swain County	120	105.3	88.2	40.9	60.2	63.4	56.5	118	93.7	94.4	43.1	65.3	61.2	59.1
Transylvania County	199	63.8	61.4	38.6	56.8	36.2	30.9	282	87.6	91.6	40.9	61.9	54.2	48.3
Tyrrell County	63	108.6	105.0	43.1	63.4	68.9	64.5	60	107.1	115.4	41.1	62.3	66.8	64.5
Union County	932	97.4	82.8	43.0	63.3	61.6	56.7	784	79.4	91.7	41.9	63.6	50.5	47.6
Monroe City	174	86.1	79.8	38.8	57.1	49.2	42.1	179	78.5	89.1	40.4	61.2	48.0	43.2
Vance County	482	86.8	85.9	35.4	52.0	45.2	34.5	518	94.5	106.6	37.4	56.6	53.5	47.0
Wake County	3,267	74.8	69.0	42.3	62.2	46.5	41.9	4,386	97.9	104.0	45.6	69.1	67.7	65.3
Warren County	230	107.0	81.9	38.3	56.4	60.3	50.4	216	85.0	95.2	39.8	60.3	51.3	48.2
Washington County	212	99.5	94.6	39.2	57.6	57.3	46.0	193	86.9	92.8	39.4	59.7	51.9	47.3
Watauga County	278	83.2	78.5	46.5	68.4	56.9	54.5	287	93.8	100.3	41.9	63.6	59.7	53.2
Wayne County	967	97.8	97.8	39.8	58.5	57.2	49.0	971	92.0	98.1	40.5	61.4	56.5	52.1
Goldsboro City	325	92.9	92.3	35.5	52.1	48.4	35.4	264	79.8	94.0	36.6	55.5	44.3	37.6
Wilkes County	512	66.8	63.4	37.0	54.5	36.4	30.3	735	90.6	103.7	40.9	61.9	56.1	52.1
Wilson County	815	97.3	82.7	40.1	59.0	57.4	50.1	726	81.2	91.4	40.9	62.0	50.3	47.0
Yadkin County	327	90.3	84.5	38.3	56.4	50.9	42.8	364	90.3	92.9	39.6	60.0	54.2	49.0
Yancey County	195	96.5	89.4	45.3	66.6	64.3	59.0	189	84.8	91.3	39.9	60.4	51.2	47.7

Comprehensive Results

	Chemistry							Physics						
	Number Tested	Percent 8th Grade 87-88	Percent 11th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield	Number Tested	Percent 8th Grade 86-87	Percent 12th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield
Alamance County	371	46.1	56.0	38.8	64.6	29.8	28.6	101	12.9	15.9	38.6	64.3	8.3	7.9
Burlington City	213	48.0	60.7	38.6	64.4	30.9	29.6	131	25.2	32.8	40.5	67.4	17.0	16.9
Alexander County	100	26.1	32.1	37.8	63.1	16.5	16.0	17	4.5	6.2	35.6	59.4	2.7	2.4
Alleghany County	50	39.4	44.6	40.7	67.8	26.7	26.2	11	8.5	11.5	38.5	64.1	5.4	5.4
Anson County	103	26.4	32.9	36.6	61.0	16.1	14.2	24	6.1	7.9	31.7	52.9	3.2	2.6
Ashe County	95	30.8	38.2	42.4	70.7	21.8	21.8	36	12.0	15.7	40.9	68.2	8.2	8.2
Avery County	56	26.0	32.4	38.0	63.3	16.5	15.3	27	11.1	15.8	34.9	58.1	6.5	6.2
Beaufort County	120	35.3	41.2	36.8	61.3	21.6	20.7	19	5.7	7.8	31.9	53.2	3.1	2.6
Washington City	124	44.4	50.4	43.0	71.7	31.9	31.4	29	10.2	12.4	39.7	66.1	6.7	6.5
Bertie County	60	16.9	21.4	43.7	72.8	12.3	12.3	9	3.2	3.9	34.0	56.7	1.8	1.6
Bladen County	181	39.1	45.3	37.9	63.2	24.7	23.5	42	8.5	11.7	33.0	55.0	4.6	3.5
Brunswick County	285	40.6	51.9	36.5	60.8	24.7	23.0	106	14.7	21.6	39.9	66.6	9.8	9.8
Buncombe County	734	44.2	51.9	40.4	67.3	29.7	28.4	212	12.0	15.2	40.4	67.3	8.1	7.8
Asheville City	183	54.3	62.2	39.8	66.4	36.1	34.3	33	10.5	14.3	39.6	66.0	6.9	6.5
Burke County	297	28.3	37.0	43.8	73.1	20.7	20.5	98	9.8	13.6	41.2	68.7	6.7	6.7
Cabarrus County	430	46.2	56.5	44.1	73.4	33.9	33.8	124	12.4	15.7	38.5	64.2	8.0	7.4
Kannapolis City	145	43.8	60.9	42.0	70.0	30.7	29.8	38	10.7	14.9	41.4	68.9	7.4	7.4
Caldwell County	284	29.6	46.5	41.3	68.9	20.4	19.9	47	5.0	7.5	39.8	66.3	3.3	3.3
Camden County	30	40.0	49.2	37.2	62.0	24.8	23.1	8	9.5	11.0	37.0	61.7	5.9	5.9
Carteret County	325	56.9	70.2	41.5	69.1	39.3	38.6	33	5.5	7.8	46.0	76.7	4.2	4.2
Caswell County	139	47.0	58.9	34.2	56.9	26.7	23.1	28	9.6	11.8	40.1	66.8	6.4	6.4
Catawba County	334	33.4	39.2	40.9	68.1	22.7	22.2	99	9.9	13.1	40.1	66.8	6.6	6.6
Hickory City	146	43.2	59.8	42.2	70.4	30.4	29.8	49	12.6	18.9	41.3	68.8	8.7	8.5
Newton City	85	36.8	47.8	42.8	71.3	26.2	25.0	53	22.1	28.2	40.8	68.0	15.0	15.0
Chatham County	149	37.6	46.0	41.9	69.8	26.3	26.1	35	7.8	9.3	39.4	65.7	5.1	4.8
Cherokee County	140	44.4	52.0	40.7	67.8	30.1	30.1	45	15.2	19.5	38.7	64.6	9.8	9.8
Chowan County	90	46.2	52.6	38.2	63.6	29.4	26.7	8	4.4	5.7	41.9	69.8	3.1	3.1
Clay County	42	41.6	50.0	41.7	69.5	28.9	28.2	12	9.8	13.0	42.2	70.4	6.9	6.9
Cleveland County	199	30.1	36.9	39.0	65.0	19.5	18.3	63	9.4	13.7	37.7	62.8	5.9	5.6
Kings Mountain City	77	24.0	32.4	41.8	69.7	16.7	16.7	19	5.6	8.4	42.8	71.4	4.0	4.0
Shelby City	146	57.9	64.6	38.4	64.0	37.1	33.8	23	9.7	11.9	37.0	61.7	6.0	5.8
Columbus County	106	16.9	19.1	38.2	63.7	10.8	9.9	87	13.2	17.3	35.5	59.2	7.8	7.6
Whiteville City	95	47.0	57.6	42.7	71.2	33.5	32.8	70	35.7	44.3	38.0	63.4	22.6	22.3
Craven County	254	25.4	31.4	40.0	66.7	16.9	16.3	104	10.5	14.0	39.8	66.4	6.9	6.8
Cumberland County	1,434	45.7	50.4	37.7	62.9	28.8	26.0	319	9.8	11.9	39.0	65.1	6.4	6.2
Currituck County	43	24.2	29.9	38.6	64.3	15.5	15.5	17	10.2	13.1	44.0	73.3	7.5	7.5

Comprehensive Results

	Chemistry							Physics						
	Number Tested	Percent 8th Grade 87-88	Percent 11th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield	Number Tested	Percent 8th Grade 86-87	Percent 12th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield
Dare County	92	43.8	52.0	45.2	75.3	33.0	33.0	28	14.7	16.2	42.1	70.2	10.3	10.3
Davidson County	629	49.4	58.4	38.1	63.4	31.3	29.4	225	17.5	22.4	34.7	57.8	10.1	9.2
Lexington City	76	29.7	39.8	36.0	60.0	17.8	15.0	23	8.6	13.3	31.3	52.2	4.5	3.5
Thomasville City	37	20.0	25.7	37.9	63.1	12.6	11.3	6	3.1	4.4	47.0	78.3	2.4	2.4
Davie County	143	37.9	46.1	45.1	75.2	28.5	28.1	18	4.3	5.6	49.1	81.9	3.5	3.5
Duplin County	232	39.4	47.3	37.6	62.7	24.7	22.5	66	10.3	13.2	39.6	66.1	6.8	6.6
Durham County	729	53.0	66.9	44.1	73.4	38.9	38.6	238	17.8	23.6	40.0	66.6	11.8	11.6
Durham City	267	47.5	81.9	32.1	53.5	25.4	19.1	52	8.6	16.1	34.0	56.6	4.9	4.3
Edgecombe County	138	34.0	43.7	36.9	61.4	20.9	19.5	47	12.0	17.0	37.5	62.5	7.5	7.5
Tarboro City	136	52.9	69.0	35.5	59.1	31.3	27.1	20	9.1	12.0	35.7	59.5	5.4	5.4
Forsyth County	1,114	40.9	44.2	41.0	68.4	28.0	27.0	361	13.3	15.5	40.6	67.7	9.0	8.8
Franklin County	144	42.2	55.8	38.8	64.6	27.3	26.3	39	9.3	12.8	38.8	64.7	6.0	5.9
Franklinton City	21	19.4	21.9	43.1	71.8	14.0	13.3	8	6.5	10.3	42.0	70.0	4.6	4.6
Gaston County	865	34.7	44.7	38.1	63.6	22.1	21.0	277	10.0	15.1	37.2	62.0	6.2	5.9
Gates County	48	41.0	49.0	38.2	63.7	26.1	24.5	29	24.4	29.6	35.2	58.7	14.3	13.8
Graham County	24	25.5	29.3	42.3	70.6	18.0	16.5	5	4.4	6.4	45.2	75.3	3.3	3.3
Granville County	186	34.2	43.6	36.1	60.1	20.5	18.2	58	10.0	13.9	35.9	59.9	6.0	5.7
Greene County	86	40.6	49.7	40.6	67.7	27.5	26.5	18	7.9	11.8	36.8	61.4	4.9	4.9
Guilford County	967	54.4	60.6	39.9	66.5	36.2	34.5	203	10.4	12.4	38.4	64.0	6.6	6.5
Greensboro City	784	50.4	62.7	40.0	66.6	33.6	32.0	227	14.4	19.0	40.3	67.2	9.7	9.4
High Point City	186	30.0	45.3	43.0	71.7	21.5	21.4	51	8.6	12.3	43.5	72.6	6.2	6.2
Halifax County	172	33.1	42.9	33.8	56.4	18.7	16.5	35	6.3	10.5	33.5	55.8	3.5	2.9
Roanoke Rapids City	99	52.1	54.7	46.1	76.9	40.1	39.7	29	13.4	14.4	38.8	64.6	8.6	8.6
Weldon City	30	29.4	50.0	29.3	48.8	14.4	11.0	9	11.0	14.8	31.1	51.9	5.7	5.7
Harnett County	310	33.0	41.8	38.0	63.3	20.9	19.5	83	9.4	12.2	39.2	65.3	6.1	6.0
Haywood County	197	32.5	38.5	39.4	55.7	21.3	20.5	68	10.1	12.6	39.5	65.8	6.6	6.6
Henderson County	190	28.0	33.5	42.6	71.0	19.9	19.8	35	5.1	7.2	43.6	72.7	3.7	3.7
Hendersonville City	88	76.5	71.0	45.3	75.5	57.8	57.1	31	25.6	23.5	43.4	72.3	18.5	18.5
Hertford County	135	44.3	57.9	36.0	59.9	26.5	23.8	21	6.0	8.8	36.4	60.6	3.6	3.6
Hoke County	139	34.1	49.6	37.0	61.6	21.0	19.8	47	12.4	17.9	34.1	56.8	7.0	6.3
Hyde County	20	31.3	41.7	41.4	69.1	21.6	21.6	7	9.5	10.4	39.1	65.2	6.2	6.2
Iredell County	361	32.6	40.6	37.7	62.8	20.5	18.6	74	7.0	9.5	33.7	56.2	3.9	3.6
Mooresville City	61	42.4	40.1	48.2	80.3	34.0	34.0	17	8.5	11.3	45.1	75.2	6.4	6.4
Jackson County	117	37.6	45.0	41.7	69.6	26.2	25.5	36	12.0	16.4	39.9	66.5	8.0	8.0
Johnston County	427	38.0	46.9	41.5	69.1	26.2	25.5	145	12.7	17.2	39.2	65.3	8.3	8.2
Jones County	32	31.4	38.1	42.4	70.6	22.1	22.1	5	4.1	5.6	37.4	62.3	2.6	2.6

Comprehensive Results

	Chemistry							Physics						
	Number Tested	Percent 8th Grade 87-88	Percent 11th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield	Number Tested	Percent 8th Grade 86-87	Percent 12th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield
Lee County	**130**	**24.0**	**29.3**	**43.3**	**72.1**	**17.3**	**17.2**	**31**	**5.8**	**8.7**	**42.6**	**71.1**	**4.1**	**4.1**
Lenoir County	**208**	**41.0**	**49.9**	**39.6**	**65.9**	**27.0**	**25.7**	**11**	**2.1**	**2.7**	**45.4**	**75.6**	**1.6**	**1.6**
Kinston City	**130**	**35.0**	**44.5**	**39.9**	**66.5**	**23.3**	**21.7**	**41**	**10.1**	**14.9**	**41.2**	**68.6**	**7.0**	**6.8**
Lincoln County	219	33.2	39.8	39.4	65.6	21.8	20.6	63	8.6	11.5	40.4	67.4	5.8	5.8
Macon County	97	35.4	43.7	41.3	68.9	24.4	24.1	16	6.6	8.0	41.3	68.9	4.5	4.5
Madison County	71	30.1	38.0	37.5	62.5	18.8	17.2	18	7.2	11.4	41.5	69.2	5.0	5.0
Martin County	**196**	**44.4**	**54.6**	**36.9**	**61.5**	**27.3**	**25.5**	**76**	**16.7**	**21.8**	**34.4**	**57.4**	**9.6**	**8.7**
McDowell County	**149**	**25.7**	**32.7**	**42.4**	**70.7**	**18.2**	**17.8**	**16**	**2.7**	**4.4**	**46.5**	**77.5**	**2.1**	**2.1**
Mecklenburg County	**2,535**	**47.6**	**57.9**	**40.2**	**67.0**	**31.9**	**30.2**	**728**	**12.6**	**16.9**	**38.6**	**64.3**	**8.1**	**7.7**
Mitchell County	40	21.1	28.2	38.8	64.7	13.6	12.3	13	6.6	9.8	45.0	75.0	4.9	4.9
Montgomery County	116	36.5	44.3	36.9	61.6	22.5	20.5	45	12.6	17.5	34.5	57.6	7.3	6.3
Moore County	281	42.1	49.7	38.8	64.7	27.2	25.6	66	10.2	13.1	40.3	67.2	6.8	6.7
Nash County	**321**	**36.7**	**42.7**	**39.9**	**66.5**	**24.4**	**23.4**	**89**	**9.6**	**12.8**	**38.6**	**64.4**	**6.2**	**6.1**
Rocky Mount City	**158**	**38.2**	**56.0**	**39.5**	**65.9**	**25.2**	**24.2**	**35**	**7.7**	**12.1**	**39.1**	**65.2**	**5.0**	**4.9**
New Hanover County	**885**	**61.5**	**77.6**	**42.4**	**70.7**	**43.5**	**42.8**	**238**	**15.6**	**19.9**	**38.6**	**64.3**	**10.0**	**9.8**
Northampton County	141	47.0	61.3	32.4	53.9	25.3	19.2	49	15.6	20.6	32.1	53.5	8.3	7.0
Onslow County	360	30.8	37.9	40.9	68.2	21.0	20.8	134	10.9	14.3	38.3	63.8	7.0	6.9
Orange County	147	35.3	55.5	38.2	63.7	22.5	21.4	31	7.4	10.4	42.5	70.9	5.3	5.3
Chapel Hill City	**312**	**86.9**	**89.1**	**45.0**	**75.0**	**65.2**	**62.7**	**167**	**40.0**	**44.4**	**46.1**	**76.8**	**30.8**	**30.6**
Pamlico County	**52**	**34.0**	**40.6**	**40.8**	**68.0**	**23.1**	**23.1**	**13**	**8.1**	**10.3**	**34.6**	**57.7**	**4.7**	**4.7**
Pasquotank County	**113**	**28.8**	**33.1**	**41.3**	**68.8**	**19.8**	**19.4**	**12**	**3.1**	**4.2**	**41.5**	**69.2**	**2.2**	**2.2**
Pender County	102	30.4	34.8	39.3	65.6	20.0	19.6	39	9.4	11.3	37.0	61.7	5.8	5.5
Perquimans County	57	48.7	55.3	41.6	69.3	33.8	33.2	18	14.4	17.8	42.1	70.1	10.1	10.1
Person County	110	27.0	30.5	43.5	72.5	19.5	19.5	23	5.4	7.3	34.7	57.8	3.1	3.1
Pitt County	**629**	**49.7**	**59.6**	**40.6**	**67.6**	**33.6**	**32.8**	**178**	**14.5**	**18.6**	**42.5**	**70.9**	**10.3**	**10.1**
Polk County	**73**	**44.2**	**60.3**	**41.2**	**68.6**	**30.4**	**30.4**	**15**	**8.2**	**12.2**	**37.2**	**62.0**	**5.1**	**5.1**
Randolph County	**264**	**24.9**	**36.6**	**40.2**	**67.0**	**16.7**	**15.9**	**57**	**5.4**	**7.9**	**41.8**	**69.6**	**3.7**	**3.7**
Asheboro City	131	50.4	66.5	38.9	64.8	32.6	30.4	19	6.6	8.6	39.3	65.4	4.3	4.1
Richmond County	234	32.7	48.9	33.3	55.4	18.1	14.6	42	5.8	8.5	32.4	54.0	3.2	2.7
Robeson County	588	30.1	43.8	35.8	59.7	18.0	16.2	121	6.0	9.9	34.5	57.5	3.4	3.0
Rockingham County	**114**	**37.4**	**50.9**	**37.6**	**62.7**	**23.4**	**20.4**	**31**	**12.1**	**16.1**	**37.7**	**62.9**	**7.6**	**7.4**
Eden City	**178**	**55.1**	**63.1**	**34.3**	**57.1**	**31.5**	**27.2**	**83**	**27.8**	**33.6**	**35.4**	**59.0**	**16.4**	**15.2**
West. Rockingham	**118**	**43.9**	**53.9**	**40.8**	**67.9**	**29.8**	**29.3**	**39**	**12.3**	**17.3**	**36.3**	**60.6**	**7.5**	**5.9**
Reidsville City	96	33.9	46.6	35.0	58.4	19.8	17.3	15	4.9	7.2	42.0	70.0	3.4	3.4
Rowan County	508	42.3	54.1	40.1	66.9	28.3	27.2	105	8.9	11.9	37.4	62.4	5.6	5.5
Rutherford County	183	22.1	28.6	43.2	72.1	16.0	15.8	36	4.4	6.3	42.7	71.1	3.1	3.1

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Comprehensive Results

	Chemistry							Physics						
	Number Tested	Percent 8th Grade 87-88	Percent 11th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield	Number Tested	Percent 8th Grade 86-87	Percent 12th Grade 90-91	Average Core	Percent Correct	Yield	Effective Yield
Sampson County	151	28.2	31.9	39.7	66.1	18.6	17.6	45	9.5	10.8	38.2	63.7	6.0	5.9
Clinton City	54	23.7	27.4	36.8	61.3	14.5	14.0	18	8.5	11.9	34.3	57.1	4.8	4.6
Scotland County	174	29.7	38.8	39.9	66.5	19.8	19.0	44	7.6	12.3	38.8	64.7	4.9	4.8
Stanly County	228	44.4	53.3	41.7	69.6	30.9	29.9	72	14.0	18.4	38.3	63.8	9.0	8.6
Albemarle City	96	68.6	71.1	40.2	67.0	45.9	45.5	24	17.6	18.0	41.0	68.3	12.1	12.1
Stokes County	186	36.8	45.4	38.6	64.3	23.7	21.5	31	5.5	7.7	36.4	60.6	3.4	3.4
Surry County	249	39.6	48.0	37.4	62.4	24.7	23.4	49	7.5	10.2	36.7	61.1	4.6	4.5
Elkin City	47	62.7	61.8	39.3	65.5	41.0	41.0	10	15.4	15.9	40.3	67.2	10.3	10.3
Mount Airy City	113	84.3	101.8	40.7	67.9	57.3	54.7	38	26.2	35.2	41.8	69.6	18.2	18.2
Swain County	49	45.4	52.7	41.7	69.4	31.5	29.6	17	10.9	15.7	43.0	71.7	7.8	7.8
Transylvania County	126	37.5	45.3	42.5	70.9	26.6	25.5	53	17.6	21.3	36.2	60.3	10.6	10.0
Tyrrell County	19	39.6	45.2	39.7	66.1	26.2	26.2	14	21.5	25.9	33.6	56.0	12.1	12.1
Union County	298	32.9	35.9	44.0	73.3	24.1	24.0	77	7.8	10.1	42.5	70.9	5.5	5.5
Monroe City	80	36.4	49.1	38.5	64.1	23.3	23.0	20	7.9	13.7	35.7	59.5	4.7	4.2
Vance County	181	34.0	48.7	36.2	60.4	20.5	18.7	54	9.3	12.7	37.5	62.6	5.8	5.5
Wake County	2,737	61.4	69.4	43.8	73.0	44.8	44.0	1,184	28.0	32.4	42.8	71.3	20.0	19.6
Warren County	59	24.5	32.6	37.4	62.3	15.3	15.0	10	4.2	5.8	36.9	61.5	2.6	2.6
Washington County	94	44.3	51.1	37.7	62.8	27.8	26.1	14	5.8	7.6	38.3	63.8	3.7	3.4
Watauga County	102	31.1	36.0	48.0	79.9	24.8	24.8	32	9.0	12.2	47.8	79.7	7.1	7.1
Wayne County	528	52.7	59.7	39.4	65.7	34.7	32.8	139	13.4	16.1	40.4	67.3	9.0	9.0
Goldsboro City	150	48.9	56.0	35.0	58.3	28.5	23.7	30	8.5	12.1	36.0	59.9	5.1	4.8
Wilkes County	287	34.5	45.0	39.2	65.3	22.5	21.2	85	9.9	14.5	38.0	63.3	6.3	5.9
Wilson County	277	31.5	41.0	41.5	69.2	21.8	21.3	79	8.4	11.7	38.9	64.9	5.4	5.3
Yadkin County	169	43.3	55.4	37.3	62.2	27.0	25.2	24	6.3	7.6	40.7	67.9	4.3	4.3
Yancey County	71	33.5	42.0	36.3	60.5	20.3	18.3	18	8.0	9.9	41.0	68.3	5.5	5.5

Appendix: Core Score Distributions on the End-of-Course Tests

Core Score Distribution on the 1991 Algebra I Test

Number of students
with valid scores 60,988
Mean 41.1

High Score 60
Low Score 3
Standard Deviation 9.9
Variance 97.1

Percentiles		Core Scores
90		53.34
75		48.60
50	(Median)	42.10
25		34.45
10		27.25

Core Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent	State Percentile
60	224	60,988	0.37	100.00	99
59	428	60,764	0.70	99.63	99
58	627	60,336	1.03	98.93	98
57	833	59,709	1.37	97.90	97
56	1,061	58,876	1.74	96.54	96
55	1,237	57,815	2.03	94.80	94
54	1,441	56,578	2.36	92.77	92
53	1,582	55,137	2.59	90.41	89
52	1,743	53,555	2.86	87.81	86
51	1,994	51,812	3.27	84.95	83
50	2,036	49,818	3.34	81.68	80
49	2,260	47,782	3.71	78.35	76
48	2,274	45,522	3.73	74.64	73
47	2,349	43,248	3.85	70.91	69
46	2,375	40,899	3.89	67.06	65
45	2,453	38,524	4.02	63.17	61
44	2,372	36,071	3.89	59.14	57
43	2,276	33,699	3.73	55.26	53
42	2,319	31,423	3.80	51.52	50
41	2,151	29,104	3.53	47.72	46
40	2,133	26,953	3.50	44.19	42
39	2,058	24,820	3.37	40.70	39
38	1,966	22,762	3.22	37.32	36
37	1,914	20,796	3.14	34.10	33
36	1,811	18,882	2.97	30.96	29
35	1,752	17,071	2.87	27.99	27
34	1,551	15,319	2.54	25.12	24
33	1,473	13,768	2.42	22.57	21
32	1,435	12,295	2.35	20.16	19
31	1,252	10,860	2.05	17.81	17
30	1,138	9,608	1.87	15.75	15
29	1,115	8,470	1.83	13.89	13
28	1,026	7,355	1.68	12.06	11
27	909	6,329	1.49	10.38	10
26	847	5,420	1.39	8.89	8
25	769	4,573	1.26	7.50	7
24	662	3,804	1.09	6.24	6
23	566	3,142	0.93	5.15	5
22	496	2,576	0.81	4.22	4
21	391	2,080	0.64	3.41	3
20	342	1,689	0.56	2.77	2
19	300	1,347	0.49	2.21	2
Less Than 19	1,047	1,047	1.72	1.72	2

Core Score Distribution on the 1991 Geometry Test

Number of students
with valid scores 44,325
Mean 38.8

High Score 60
Low Score 6
Standard Deviation 10.4
Variance 107.3

Percentiles		Core Scores
90		52.99
75		46.78
50	(Median)	38.77
25		31.01
10		25.02

Core Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent	State Percentile
60	170	44,325	0.38	100.00	99
59	349	44,155	0.79	99.62	99
58	501	43,806	1.13	98.83	98
57	629	43,305	1.42	97.70	97
56	687	42,676	1.55	96.28	96
55	813	41,989	1.83	94.73	94
54	834	41,176	1.88	92.90	92
53	877	40,342	1.98	91.01	90
52	970	39,465	2.19	89.04	88
51	1,014	38,495	2.29	86.85	86
50	1,069	37,481	2.41	84.56	83
49	1,145	36,412	2.58	82.15	81
48	1,157	35,267	2.61	79.56	78
47	1,199	34,110	2.71	76.95	76
46	1,216	32,911	2.74	74.25	73
45	1,356	31,695	3.06	71.51	70
44	1,322	30,339	2.98	68.45	67
43	1,419	29,017	3.20	65.46	64
41	1,456	26,177	3.28	59.06	57
40	1,485	24,721	3.35	55.77	54
39	1,479	23,236	3.34	52.42	51
38	1,509	21,757	3.40	49.09	47
37	1,455	20,248	3.28	45.68	44
36	1,488	18,793	3.36	42.40	41
35	1,458	17,305	3.29	39.04	37
34	1,429	15,847	3.22	35.75	34
33	1,389	14,418	3.13	32.53	31
32	1,304	13,029	2.94	29.39	28
31	1,303	11,725	2.94	26.45	25
30	1,256	10,422	2.83	23.51	22
29	1,194	9,166	2.69	20.68	19
28	1,128	7,972	2.54	17.99	17
27	1,070	6,844	2.41	15.44	14
26	931	5,774	2.10	13.03	12
25	859	4,843	1.94	10.93	10
24	717	3,984	1.62	8.99	8
23	691	3,267	1.56	7.37	7
22	536	2,576	1.21	5.81	5
21	507	2,040	1.14	4.60	4
20	381	1,533	0.86	3.46	3
19	318	1,152	0.72	2.60	2
Less Than 19	834	834	1.88	1.88	2

Core Score Distribution on the 1991 Algebra II Test

Number of students
with valid scores 35,828
Mean 38.8

High Score 56
Low Score 6
Standard Deviation 9.0
Variance 81.4

Percentiles		Core Scores
90		50.51
75		45.67
50	(Median)	39.24
25		32.60
10		26.50

Core Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent	State Percentile
56	176	35,828	0.49	100.00	99
55	381	35,652	1.06	99.51	99
54	576	35,271	1.61	98.45	98
53	721	34,695	2.01	96.84	96
52	811	33,974	2.26	94.83	94
51	923	33,163	2.58	92.56	91
50	995	32,240	2.78	89.99	89
49	1,028	31,245	2.87	87.21	86
48	1,125	30,217	3.14	84.34	83
47	1,177	29,092	3.29	81.20	80
46	1,263	27,915	3.53	77.91	76
45	1,336	26,652	3.73	74.39	73
44	1,309	25,316	3.65	70.66	69
43	1,365	24,007	3.81	67.01	65
42	1,401	22,642	3.91	63.20	61
41	1,472	21,241	4.11	59.29	57
40	1,471	19,769	4.11	55.18	53
39	1,474	18,298	4.11	51.07	49
38	1,411	16,824	3.94	46.96	45
37	1,428	15,413	3.99	43.02	41
36	1,390	13,985	3.88	39.03	37
35	1,292	12,595	3.61	35.15	33
34	1,261	11,303	3.52	31.55	30
33	1,207	10,042	3.37	28.03	26
32	1,134	8,835	3.17	24.66	23
31	979	7,701	2.73	21.49	20
30	903	6,722	2.52	18.76	18
29	848	5,819	2.37	16.24	15
28	745	4,971	2.08	13.87	13
27	646	4,226	1.80	11.80	11
26	555	3,580	1.55	9.99	9
25	510	3,025	1.42	8.44	8
24	447	2,515	1.25	7.02	6
23	401	2,068	1.12	5.77	5
22	325	1,667	0.91	4.65	4
21	297	1,342	0.83	3.75	3
20	224	1,045	0.63	2.92	3
19	213	821	0.59	2.29	2
18	159	608	0.44	1.70	1
17	144	449	0.40	1.25	1
Less Than 17	305	305	0.85	0.85	1

Core Score Distribution on the 1991 ELP Test

Number of students
with valid scores 76,593
Mean 41.7

High Score 67
Low Score 3
Standard Deviation 11.6
Variance 135.4

Percentiles		Core Scores
90		56.21
75		50.87
50	(Median)	42.92
25		33.28
10		24.85

Core Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent	State Percentile
67	9	76,593	0.01	100.00	99
66	31	76,584	0.04	99.99	99
65	81	76,553	0.11	99.95	99
64	177	76,472	0.23	99.84	99
63	312	76,295	0.41	99.61	99
62	514	75,983	0.67	99.20	99
61	767	75,469	1.00	98.53	98
60	936	74,702	1.22	97.53	97
59	1,183	73,766	1.54	96.31	96
58	1,477	72,583	1.93	94.76	94
57	1,652	71,106	2.16	92.84	92
56	1,805	69,454	2.36	90.68	90
55	2,017	67,649	2.63	88.32	87
54	2,124	65,632	2.77	85.69	84
53	2,199	63,508	2.87	82.92	81
52	2,396	61,309	3.13	80.05	78
51	2,348	58,913	3.07	76.92	75
50	2,547	56,565	3.33	73.85	72
49	2,398	54,018	3.13	70.53	69
48	2,411	51,620	3.15	67.40	66
47	2,479	49,209	3.24	64.25	63
46	2,413	46,730	3.15	61.01	59
45	2,344	44,317	3.06	57.86	56
44	2,343	41,973	3.06	54.80	53
43	2,286	39,630	2.98	51.74	50
42	2,206	37,344	2.88	48.76	47
41	2,206	35,138	2.88	45.88	44
40	2,110	32,932	2.75	43.00	42
39	2,125	30,822	2.77	40.24	39
38	2,043	28,697	2.67	37.47	36
37	1,869	26,654	2.44	34.80	34
36	1,869	24,785	2.44	32.36	31
35	1,772	22,916	2.31	29.92	29
34	1,625	21,144	2.12	27.61	27
33	1,696	19,519	2.21	25.48	24
32	1,580	17,823	2.06	23.27	22
31	1,487	16,243	1.94	21.21	20
30	1,438	14,756	1.88	19.27	18
29	1,280	13,318	1.67	17.39	17
28	1,327	12,038	1.73	15.72	15
27	1,204	10,711	1.57	13.98	13
26	1,142	9,507	1.49	12.41	12
25	1,093	8,365	1.43	10.92	10
24	1,025	7,272	1.34	9.49	9
23	988	6,247	1.29	8.16	8
22	887	5,259	1.16	6.87	6
21	795	4,372	1.04	5.71	5
20	783	3,577	1.02	4.67	4
19	631	2,794	0.82	3.65	3
Less Than 19	2,163	2,163	2.82	2.82	2

Core Score Distribution on the 1991 U S History Test

Number of students
with valid scores 65,767
Mean 40.1

High Score 60
Low Score 4
Standard Deviation 9.9
Variance 98.8

Percentiles		Core Scores
90		52.52
75		47.85
50	(Median)	41.09
25		33.30
10		26.04

Core Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent	State Percentile
60	36	65,767	0.05	100.00	99
59	191	65,731	0.29	99.95	99
58	403	65,540	0.61	99.65	99
57	668	65,137	1.02	99.04	99
56	930	64,469	1.41	98.03	97
55	1,225	63,539	1.86	96.61	96
54	1,526	62,314	2.32	94.75	94
53	1,625	60,788	2.47	92.43	91
52	1,822	59,163	2.77	89.96	89
51	1,956	57,341	2.97	87.19	86
50	2,185	55,385	3.32	84.21	83
49	2,291	53,200	3.48	80.89	79
48	2,430	50,909	3.69	77.41	76
47	2,493	48,479	3.79	73.71	72
46	2,383	45,986	3.62	69.92	68
45	2,394	43,603	3.64	66.30	64
44	2,549	41,209	3.88	62.66	61
43	2,441	38,660	3.71	58.78	57
42	2,351	36,219	3.57	55.07	53
41	2,396	33,868	3.64	51.50	50
40	2,287	31,472	3.48	47.85	46
39	2,332	29,185	3.55	44.38	43
38	2,283	26,853	3.47	40.83	39
37	2,077	24,570	3.16	37.36	36
36	2,025	22,493	3.08	34.20	33
35	1,897	20,468	2.88	31.12	30
34	1,781	18,571	2.71	28.24	27
33	1,710	16,790	2.60	25.53	24
32	1,557	15,080	2.37	22.93	22
31	1,563	13,523	2.38	20.56	19
30	1,362	11,960	2.07	18.19	17
29	1,280	10,598	1.95	16.11	15
28	1,205	9,318	1.83	14.17	13
27	1,065	8,113	1.62	12.34	12
26	1,016	7,048	1.54	10.72	10
25	907	6,032	1.38	9.17	8
24	813	5,125	1.24	7.79	7
23	780	4,312	1.19	6.56	6
22	643	3,532	0.98	5.37	5
21	607	2,889	0.92	4.39	4
20	472	2,282	0.72	3.47	3
19	370	1,810	0.56	2.75	2
Less Than 19	1,440	1,440	2.19	2.19	2

Core Score Distribution on the 1991 English I Test

Number of students
with valid scores 72,023
Mean 66.2

High Score 100
Low Score 7
Standard Deviation 17.2
Variance 297.5

Percentiles		Core Scores
90		87.28
75		79.73
50	(Median)	68.50
25		54.74
10		41.17

Core Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent	State Percentile
100	6	72,023	0.01	100.00	99
99	42	72,017	0.06	99.99	99
98	101	71,975	0.14	99.93	99
97	162	71,874	0.22	99.79	99
96	265	71,712	0.37	99.57	99
95	380	71,447	0.53	99.20	99
94	472	71,067	0.66	98.67	98
93	608	70,595	0.84	98.02	98
92	757	69,987	1.05	97.17	97
91	837	69,230	1.16	96.12	96
90	968	68,393	1.34	94.96	94
89	1,115	67,425	1.55	93.62	93
88	1,218	66,310	1.69	92.07	91
87	1,244	65,092	1.73	90.38	90
86	1,334	63,848	1.85	88.65	88
85	1,372	62,514	1.90	86.80	86
84	1,424	61,142	1.98	84.89	84
83	1,472	59,718	2.04	82.92	82
82	1,525	58,246	2.12	80.87	80
81	1,578	56,721	2.19	78.75	78
80	1,462	55,143	2.03	76.56	76
79	1,586	53,681	2.20	74.53	73
78	1,543	52,095	2.14	72.33	71
77	1,645	50,552	2.28	70.19	69
76	1,607	48,907	2.23	67.90	67
75	1,645	47,300	2.28	65.67	65
74	1,655	45,655	2.30	63.39	62
73	1,633	44,000	2.27	61.09	60
72	1,579	42,367	2.19	58.82	58
71	1,594	40,788	2.21	56.63	56
70	1,626	39,194	2.26	54.42	53
69	1,562	37,568	2.17	52.16	51
68	1,453	36,006	2.02	49.99	49
67	1,522	34,553	2.11	47.97	47
66	1,466	33,031	2.04	45.86	45
65	1,399	31,565	1.94	43.83	43
64	1,403	30,166	1.95	41.88	41
63	1,446	28,763	2.01	39.94	39
62	1,359	27,317	1.89	37.93	37
61	1,265	25,958	1.76	36.04	35
60	1,267	24,693	1.76	34.28	33

Core Score Distribution on the 1991 English I Test

59	1,136	23,426	1.58	32.53	32
58	1,166	22,290	1.62	30.95	30
57	1,189	21,124	1.65	29.33	29
56	1,130	19,935	1.57	27.68	27
55	1,049	18,805	1.46	26.11	25
54	1,048	17,756	1.46	24.65	24
53	987	16,708	1.37	23.20	23
52	901	15,721	1.25	21.83	21
51	904	14,820	1.26	20.58	20
50	874	13,916	1.21	19.32	19
49	844	13,042	1.17	18.11	18
48	804	12,198	1.12	16.94	16
47	713	11,394	0.99	15.82	15
46	722	10,681	1.00	14.83	14
45	691	9,959	0.96	13.83	13
44	655	9,268	0.91	12.87	12
43	633	8,613	0.88	11.96	12
42	587	7,980	0.82	11.08	11
41	585	7,393	0.81	10.26	10
40	548	6,808	0.76	9.45	9
39	513	6,260	0.71	8.69	8
38	457	5,747	0.63	7.98	8
37	458	5,290	0.64	7.34	7
36	482	4,832	0.67	6.71	6
35	412	4,350	0.57	6.04	6
34	405	3,938	0.56	5.47	5
33	373	3,533	0.52	4.91	5
32	383	3,160	0.53	4.39	4
31	368	2,777	0.51	3.86	4
30	318	2,409	0.44	3.34	3
29	346	2,091	0.48	2.90	3
28	289	1,745	0.40	2.42	2
27	278	1,456	0.39	2.02	2
26	235	1,178	0.33	1.64	1
25	193	943	0.27	1.31	1
24	191	750	0.27	1.04	1
Less Than 25	750	750	1.04	1.04	1

Core Score Distribution on the 1991 Physical Science Test

Number of students
with valid scores 63,962
Mean 39.9

High Score 68
Low Score 4
Standard Deviation 11.2
Variance 126.1

Percentiles		Core Scores
90		55.04
75		48.23
50	(Median)	39.76
25		31.68
10		25.02

Core Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent	State Percentile
68	10	63,962	0.02	100.00	99
67	26	63,952	0.04	99.98	99
66	91	63,926	0.14	99.94	99
65	155	63,835	0.24	99.80	99
64	251	63,680	0.39	99.56	99
63	328	63,429	0.51	99.17	99
62	447	63,101	0.70	98.65	98
61	524	62,654	0.82	97.96	98
60	661	62,130	1.03	97.14	97
59	719	61,469	1.12	96.10	96
58	787	60,750	1.23	94.98	94
57	908	59,963	1.42	93.75	93
56	977	59,055	1.53	92.33	92
55	1,115	58,078	1.74	90.80	90
54	1,231	56,963	1.92	89.06	88
53	1,279	55,732	2.00	87.13	86
52	1,352	54,453	2.11	85.13	84
51	1,489	53,101	2.33	83.02	82
50	1,533	51,612	2.40	80.69	79
49	1,656	50,079	2.59	78.29	77
48	1,662	48,423	2.60	75.71	74
47	1,786	46,761	2.79	73.11	72
46	1,801	44,975	2.82	70.32	69
45	1,834	43,174	2.87	67.50	66
44	1,916	41,340	3.00	64.63	63
43	1,958	39,424	3.06	61.64	60
42	1,970	37,466	3.08	58.58	57
41	1,964	35,496	3.07	55.50	54
40	2,103	33,532	3.29	52.42	51
39	2,149	31,429	3.36	49.14	47
38	2,057	29,280	3.22	45.78	44
37	2,033	27,223	3.18	42.56	41
36	1,955	25,190	3.06	39.38	38
35	1,993	23,235	3.12	36.33	35
34	1,901	21,242	2.97	33.21	32
33	1,859	19,341	2.91	30.24	29
32	1,820	17,482	2.85	27.33	26
31	1,632	15,662	2.55	24.49	23
30	1,637	14,030	2.56	21.93	21
29	1,519	12,393	2.37	19.38	18
28	1,429	10,874	2.23	17.00	16
27	1,325	9,445	2.07	14.77	14
26	1,194	8,120	1.87	12.70	12
25	1,115	6,926	1.74	10.83	10
24	935	5,811	1.46	9.09	8
23	872	4,876	1.36	7.62	7
22	764	4,004	1.19	6.26	6
21	664	3,240	1.04	5.07	5
20	576	2,576	0.90	4.03	4
19	510	2,000	0.80	3.13	3
Less Than 19	1,490	1,490	2.33	2.33	2

Core Score Distribution on the 1991 Biology Test

Number of students
with valid scores 71,665
Mean 41.1

High Score 66
Low Score 5
Standard Deviation 10.2
Variance 103.3

Percentiles		Core Scores
90		53.82
75		48.84
50	(Median)	41.93
25		34.05
10		26.87

Core Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent	State Percentile
66	7	71,665	0.01	100.00	99
65	16	71,658	0.02	99.99	99
64	38	71,642	0.05	99.97	99
63	74	71,604	0.1	99.91	99
62	165	71,530	0.23	99.81	99
61	289	71,365	0.4	99.58	99
60	375	71,076	0.52	99.18	99
59	578	70,701	0.81	98.65	98
58	781	70,123	1.09	97.85	97
57	994	69,342	1.39	96.76	96
56	1,262	68,348	1.76	95.37	94
55	1,448	67,086	2.02	93.61	93
54	1,681	65,638	2.35	91.59	90
53	1,846	63,957	2.58	89.24	88
52	2,148	62,111	3	86.67	85
51	2,247	59,963	3.14	83.67	82
50	2,330	57,716	3.25	80.54	79
49	2,490	55,386	3.47	77.28	76
48	2,482	52,896	3.46	73.81	72
47	2,621	50,414	3.66	70.35	69
46	2,618	47,793	3.65	66.69	65
45	2,562	45,175	3.57	63.04	61
44	2,714	42,613	3.79	59.46	58
43	2,630	39,899	3.67	55.67	54
42	2,539	37,269	3.54	52	50
41	2,434	34,730	3.4	48.46	47
40	2,414	32,296	3.37	45.07	43
39	2,449	29,882	3.42	41.7	40
38	2,360	27,433	3.29	38.28	37
37	2,225	25,073	3.1	34.99	33
36	2,062	22,848	2.88	31.88	30
35	2,006	20,786	2.8	29	28
34	1,929	18,780	2.69	26.21	25
33	1,741	16,851	2.43	23.51	22
32	1,666	15,110	2.32	21.08	20
31	1,547	13,444	2.16	18.76	18
30	1,451	11,897	2.02	16.6	16
29	1,363	10,446	1.9	14.58	14
28	1,212	9,083	1.69	12.67	12
27	1,126	7,871	1.57	10.98	10
26	1,054	6,745	1.47	9.41	9
25	910	5,691	1.27	7.94	7
24	853	4,781	1.19	6.67	6
23	727	3,928	1.01	5.48	5
22	625	3,201	0.87	4.47	4
21	541	2,576	0.75	3.59	3
20	453	2,035	0.63	2.84	3
19	420	1,582	0.59	2.21	2
Less Than 19	1,162	1,162	1.62	1.62	1

Core Score Distribution on the 1991 Chemistry Test

Number of students
with valid scores 33,337
Mean 40.1

High Score 60
Low Score 6
Standard Deviation 8.6
Variance 73.6

Percentiles		Core Scores
90		51.25
75		46.38
50	(Median)	40.34
25		34.23
10		28.76

Core Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent	State Percentile
60	23	33,337	0.07	100.00	99
59	86	33,314	0.26	99.93	99
58	153	33,228	0.46	99.67	99
57	257	33,075	0.77	99.21	99
56	364	32,818	1.09	98.44	98
55	433	32,454	1.30	97.35	97
54	497	32,021	1.49	96.05	95
53	625	31,524	1.87	94.56	94
52	685	30,899	2.05	92.69	92
51	846	30,214	2.54	90.63	89
50	905	29,368	2.71	88.09	87
49	1,020	28,463	3.06	85.38	84
48	1,111	27,443	3.33	82.32	81
47	1,183	26,332	3.55	78.99	77
46	1,261	25,149	3.78	75.44	74
45	1,337	23,888	4.01	71.66	70
44	1,374	22,551	4.12	67.65	66
43	1,429	21,177	4.29	63.52	61
42	1,427	19,748	4.28	59.24	57
41	1,420	18,321	4.26	54.96	53
40	1,459	16,901	4.38	50.70	49
39	1,472	15,442	4.42	46.32	44
38	1,414	13,970	4.24	41.91	40
37	1,366	12,556	4.10	37.66	36
36	1,288	11,190	3.86	33.57	32
35	1,269	9,902	3.81	29.70	28
34	1,113	8,633	3.34	25.90	24
33	1,054	7,520	3.16	22.56	21
32	978	6,466	2.93	19.40	18
31	844	5,488	2.53	16.46	15
30	784	4,644	2.35	13.93	13
29	710	3,860	2.13	11.58	11
28	577	3,150	1.73	9.45	9
27	495	2,573	1.48	7.72	7
26	442	2,078	1.33	6.23	6
25	345	1,636	1.03	4.91	4
24	276	1,291	0.83	3.87	3
23	222	1,015	0.67	3.04	3
22	186	793	0.56	2.38	2
21	154	607	0.46	1.82	2
20	105	453	0.31	1.36	1
19	101	348	0.30	1.04	1
Less Than 19	247	247	0.74	0.74	1

Core Score Distribution on the 1991 Physics Test

Number of students
with valid scores 9,735
Mean 39.4

High Score 59
Low Score 11
Standard Deviation 8.3
Variance 68.8

Percentiles		Core Scores
90		50.16
75		45.56
50	(Median)	39.79
25		33.69
10		28.34

Core Score	Frequency	Cumulative Frequency	Percent	Cumulative Percent	State Percentile
59	10	9,735	0.10	100.00	99
58	11	9,725	0.11	99.90	99
57	32	9,714	0.33	99.78	99
56	63	9,682	0.65	99.46	99
55	93	9,619	0.96	98.81	98
54	133	9,526	1.37	97.85	97
53	152	9,393	1.56	96.49	96
52	177	9,241	1.82	94.93	94
51	224	9,064	2.30	93.11	92
50	233	8,840	2.39	90.81	90
49	262	8,607	2.69	88.41	87
48	329	8,345	3.38	85.72	84
47	342	8,016	3.51	82.34	81
46	395	7,674	4.06	78.83	77
45	394	7,279	4.05	74.77	73
44	419	6,885	4.30	70.72	69
43	426	6,466	4.38	66.42	64
42	436	6,040	4.48	62.04	60
41	415	5,604	4.26	57.57	55
40	434	5,189	4.46	53.30	51
39	431	4,755	4.43	48.84	47
38	429	4,324	4.41	44.42	42
37	408	3,895	4.19	40.01	38
36	395	3,487	4.06	35.82	34
35	373	3,092	3.83	31.76	30
34	354	2,719	3.64	27.93	26
33	322	2,365	3.31	24.29	23
32	290	2,043	2.98	20.99	19
31	276	1,753	2.84	18.01	17
30	233	1,477	2.39	15.17	14
29	239	1,244	2.46	12.78	12
28	195	1,005	2.00	10.32	9
27	148	810	1.52	8.32	8
26	131	662	1.35	6.80	6
25	102	531	1.05	5.45	5
24	101	429	1.04	4.41	4
23	85	328	0.87	3.37	3
22	73	243	0.75	2.50	2
21	58	170	0.60	1.75	1
20	34	112	0.35	1.15	1
19	18	78	0.18	0.80	1
Less Than 19	60	60	0.62	0.62	1